# VIRGINIA WILDLIFE

# Director's Column

William L. Woodfin, Jr

# Funding Our Future

In this Director's column, we will be discussing an issue that is of extreme importance to all of us, including our children and our grandchildren. The subject is funding and how your wildlife programs that are provided by the Virginia Department of Game and Inland Fisheries will be paid for after the turn of the century.

In order to understand why we must deal with this issue now, some background will be helpful. Virginia currently ranks next to last in the Southeast in wildlife spending per citizen. In addition, recent survey data indicate that 88 percent of Virginia's population does not know that our Department does not receive general tax revenues.

Since its beginning in 1916, the Department of Game and Inland Fisheries has had a strong legacy of having wildlife programs funded by the sportsmen and sportswomen of the Commonwealth. We are known as a non-general fund agency which means that we generate all of our revenue and receive no general tax dollars. Our main revenue sources are from the sale of hunting and fishing licenses, boat registrations and sales tax, federal excise taxes that are required on hunting and fishing-related equipment, and citizens' donations.

Several years ago, we recognized that the long-term revenue forecast for the Department was not optimistic. Last year this assessment was confirmed by the Auditor of Public Accounts when they evaluated our long-term funding. The Auditor was not critical of the Department's management of its funding, but agreed with the Department's staff that around the year 2000 our major source of funds, the game protection fund, will be in trouble. The game protection fund is the fund into which revenue from hunting and fishing licenses is placed and is the main operating fund for the Department.

There are several reasons for these predictions. First of all, over the last few years, hunting license sales have generally been flat and fishing license sales have only shown a slight increase. The last license increase that was granted to the Department by the legislature was in 1988, and over the past decade, the Department has had to absorb all increases in the cost of doing business. Examples of significant increases have been rent, utilities, gasoline, vehicles, and required personnel increases such as in salaries and health care. While almost all other state agencies receive general tax funds to cover such increases, we do not and must find ways of funding them within our current revenue structure.

Additional factors that affect the Department are less tangible, such as changing lifestyles. For example, in urban areas, we receive increased demands for dealing with urban wildlife problems as well as challenges on how to provide wildlife programs for our citizens in these areas.

To work with us on this challenge, the legislature created a subcommittee to evaluate funding options for the Department. The Subcommittee is chaired by Delegate A. Victor Thomas (Roanoke) who is joined by Delegates Raymond R. Guest, Jr. (Front Royal) vice-chairman; J. Paul Councill, Jr. (Franklin); Harry J. Parrish (Manassas); and Linda T. Puller (Mount Vernon). The subcommittee's Senate representatives are Richard Holland (Windsor,) and Charles Hawkins (Chatham). This subcommittee has had two public meetings where the Department has received tremendous support from our constituents. As a matter of fact, at the last meeting, over 50 speakers encouraged the subcommittee to identify reasonable funding alternatives. This subcommittee has been tremendously supportive of the Department and its mission, and we are heartened by their assistance.

To those of us who are interested in wildlife, it is "preaching to the choir" to discuss the importance of this subject. However, just to provide an indication of exactly how much revenue is generated by wildlife-related recreation, the 1996 National Survey of Fishing, Hunting and Wildlife-Associated Recreation which was conducted by the U.S. Fish and Wildlife Service indicated that wildlife and boating enhances Virginia's economy to the tune of $2.1 billion per year.

One of our most critical needs is in the area of capital improvements. A recently completed study by an independent consultant for the Department indicated that our hatcheries alone are in need of over $24 million in improvements. Most of our hatcheries have not had any significant capital improvements since they were built over 30 to 60 years ago. In addition, as the largest public landowner in the state, we also have tremendous infrastructure needs on our wildlife management areas. Our goal is to provide wildlife-related recreation for all of our citizens and our wildlife management areas are a critical part of our mission. These areas provide not only opportunities for hunting and fishing, but also offer the opportunity to view wildlife and enjoy nature.

It is extremely important that we conduct proper planning now for the Department's programs beyond the year 2000. Decisions must be made now in order to insure that Department programs are operated in accordance with our revenue. That is why it is critical that we seek appropriate funding alternatives for the Department at this time.

Our greatest asset is you, our constituent. You have been our strongest cheerleader, and at the same time, you provide us valuable input as to what you desire in wildlife-related programs. Your support and encouragement will be absolutely necessary as the legislative subcommittee moves forward with recommendations for the future funding of our department. While the subcommittee has not yet finished its work, I am very hopeful that concrete recommendations will be available when the January issue of *Virginia Wildlife* goes to press. Assuming that to be the case, I will make sure that we supply you with those recommendations in next month's Director's Column.

Thank you for supporting our department over the past 80 plus years, and we look forward to another 80 years of providing the best wildlife programs that can be made available.

*Mission Statement*

*To manage Virginia's wildlife and inland fish to maintain optimum populations of all species to serve the needs of the Commonwealth; to provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation; to promote safety for persons and property in connection with boating, hunting and fishing.*

*Small game hunting tips. See story on page 4.*

# VIRGINIA WILDLIFE

*Jim Crumley has turned his love of hunting into a world-renowned business. See story on page 13.*

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*Dedicated to the Conservation of Virginia's Wildlife and Natural Resources*

VOLUME 58 NUMBER 12

Squir

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# Squirrels and Cottontails

## *Virginia's Most Popular Small Game*

by Bob Gooch

Small game. What are we talking about when we use the phrase "small game"? What critters do we include in that general use of "small game"? An unhedged answer to that question is evasive. Depends upon who you are talking to. An answer might vary from state to state, from one wildlife manager to another, and from one hunter to another. Small game populations also vary from one part of the country to another. The small game populations in the Middle Atlantic states will not be the same as those in the Midwest.

The definition of small game is often a subjective thing in the eyes of hunters. The gray fox, for example, may be small game in the eyes of the varmint hunter who likes to call his game to the gun, but red-coated riders on horseback who ride to the chase would shudder at the use of varmint to describe their favorite quarry.

A few years ago Winchester Press published a book called *All About Small-Game Hunting in America*. I was asked to contribute chapters on squirrel, opossums, and raccoons. I had no problems with the one on squirrels. Few would question the fact that the squirrel is a small-game animal, but frankly I had never thought of opossums and raccoons as small game. Furbearers? Sure. Or the quarry of night hunters? Fine. But small game?

*Virginia's abundant small game populations offer a great way to introduce a youngster to exciting hunting opportunities.*

But that 308-page book discussed hunting techniques for the likes of cottontail rabbits, jack rabbits, snowshoe hares, squirrels, coyotes, fox, opossum, raccoon, prairie dogs, woodchucks, javelinas, bobcats, rockchucks, and even armadillos. It didn't include any of the game birds such as grouse, quail, or woodcock. Surprisingly all of those critters with the exception of jack rabbits, prairie dogs, rockchucks, javelinas, and armadillos are found in Virginia.

The wild turkey gets kicked around by those responsible for classifying small game. The wary bird is considered big game in Virginia, but in a recent writing contest sponsored by the Outdoor Writers Association of America, a story on hunting turkeys took first place in the small-game category.

But let's go back to the Virginia list of small-game mammals—bobcats, cottontail rabbits, coyotes, fox, opossum, raccoon, snowshoe hares,

squirrels, and woodchucks. An impressive list.

But how do Virginia hunters look at them?

Bobcats are better known as furbearers though night hunters take a few every season. The cottontail rabbit is one of our most popular small-game animals, the coyote is unprotected but if it ever receives protection it will probably be as a furbearer though varmint hunters like to hunt them. The fox is a furbearer, but also popular among hunters who follow the hounds. Opossums and raccoons are best known to night hunters, though trappers also take them for their fur. The snowshoe rabbit would be a favorite of rabbit hunters, but its numbers are low and it is now protected. The squirrel vies with the rabbit as the most popular small game animal in Virginia. The woodchuck is considered a varmint and is not protected. Many riflemen love to hunt 'chucks, however, and they enjoy good shooting in Virginia.

That process of elimination leaves the cottontail rabbit and the squirrel as the only critters in the broad group that are hunted solely by small-game hunters. Certainly in the minds of many, rabbits and squirrels are the favorite of small-game hunters in Virginia. Mention small game and these two little mammals immediately come to mind.

With that thought in mind I will devote the remainder of this story to techniques employed by Virginia rabbit and squirrel hunters. The two are probably equally popular, but I will take them in alphabetical order and begin with the cottontail rabbit.

As a youngster growing up in the Old Dominion, I was first introduced to rabbits by way of box traps. The age-old rabbit trap is a simple box with a trigger and a falling door which drops when released by the trigger. Rabbits are lured into the box by such delicacies as apples, carrots, or onions. Onions are probably best because of the strong odor they send forth. The bait is placed far back in the trap and in order to reach it the rabbit has to pass beneath the trigger which is tripped to drop the door. My brother and I usually checked our traps together and when we saw a door down we knew we were in business. We would turn the trap so the opening was facing upward. The trapped rabbit would be facing us when we looked in. By reaching beyond the rabbit we could catch it by its back legs, yank it out, and put it out of commission with a sharp chop with the edge of our hands just behind its ears. Rural youths have taken millions of cottontails with box traps.

The cottontail rabbit is a highly prolific critter which breeds several litters of young every year. Its numbers usually remain high, though the populations dropped alarmingly a few years ago. In fact the hunting became so poor that many beagle owners sold their little hounds. Whatever the problem, it corrected itself. Today the cottontail's numbers are high and the cries of little beagle hounds on the hot trail of a scurrying cottontail again ring through the thin air of cold winter mornings throughout the Old Dominion. Hopefully bunnies are back to stay this time. They have long been a mainstay in the Virginia scene.

Even as I write this a couple of rabbits are cavorting at the edge of my yard, and I've noticed many young ones that dodge quickly into cover when I approach. It looks like the 1997-98 rabbit season should be a good one in Virginia. I'm looking forward to it.

The little beagle hound is the very heart of rabbit hunting though there are also other ways to hunt cottontails. The more avid rabbit hunters own large packs of the little hounds, sometimes as many as a dozen of the friendly little dogs. But a lone beagle can provide hours of happy fall and winter hunting.

Typically a lone beagle among the pack jumps a rabbit and its excited cries quickly bring the rest of the pack. The merry chase takes off through the countryside. The cries of the little hounds are music to the ears of a true rabbit hunter. The beagles rarely catch a rabbit, but it's the nature of the bunny to make a circle and eventually head for home—the place from which it was jumped. The hunters take stands near the site of the jump and wait, hoping to get a shot at the bunny as it circles back.

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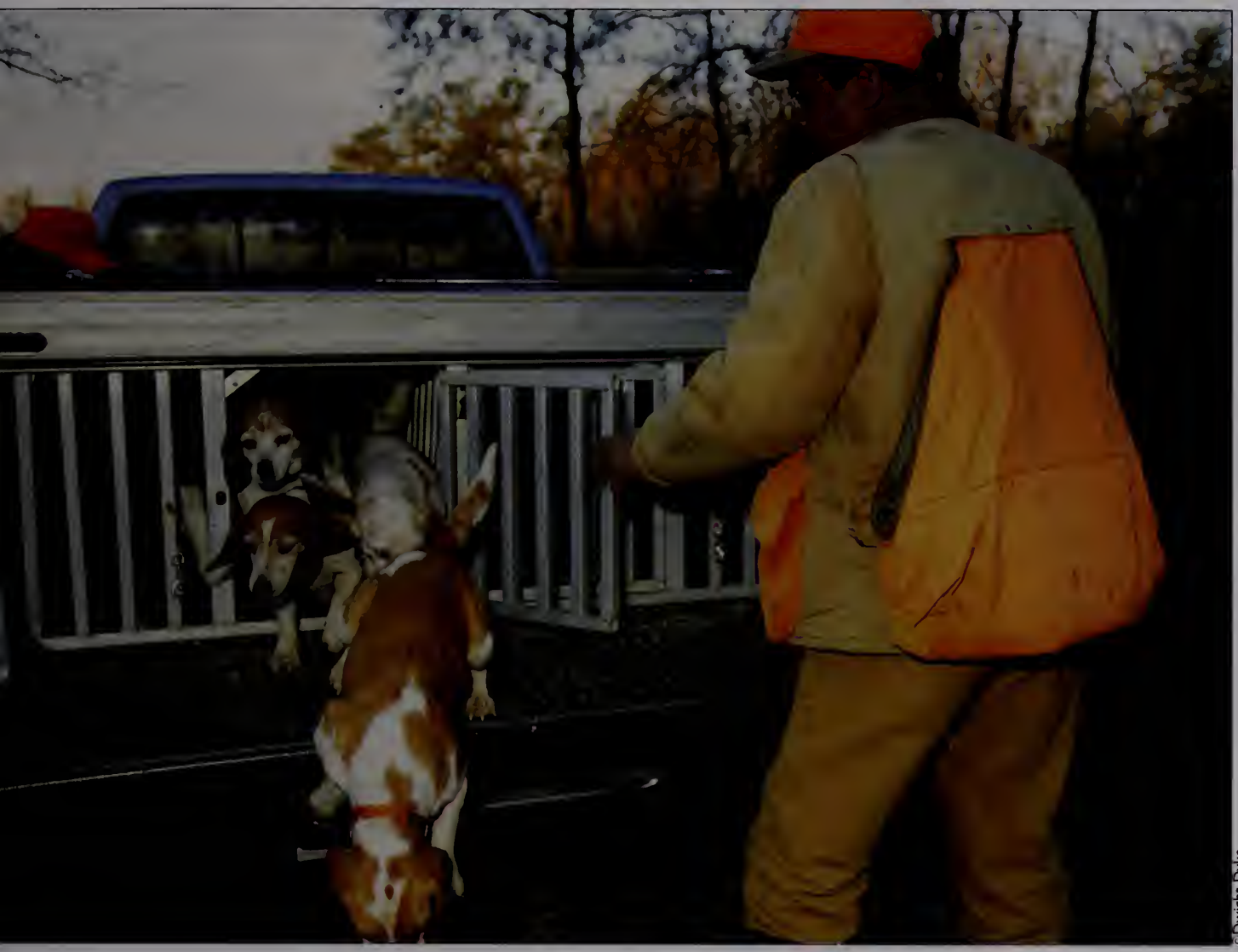
***Top:*** *Using a well-trained pack of "rabbit" beagles has its advantages.* ***Above:*** *A master of disguise, Virginia's gray squirrel can be one tough nut for a hunter to crack.* ***Right:*** *The day has finally come, and it's times like these that hunters and hounds live for.*

Box traps and beagles are not the only way to hunt rabbits. One interesting method, when the conditions are right, is to track them in the snow. The tracks will eventually lead to a brush pile or briar patch where the rabbit has holed up.



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Hunters carrying little .22 caliber rifles will search the cover thoroughly hoping to locate the animal in its form where it can be taken cleanly with a head shot.

Shotgunners on the other hand will jump up and down on the brush pile or wade into the briar patch hoping to flush the bunny and take it going away.

The squirrel season, which opened in early September in parts of the state and in October in the remainder and runs through January, is one of our longest. In reality there are two seasons, the early one when squirrels are raiding ripe corn crops and feasting on fresh nuts and the winter hunting where an entirely different approach to hunting is required.

The early squirrel season in a number of Southside and Southwest Virginia counties is a concession to the tradition of hunting squirrels when they are raiding ripe crops or feeding in hickory groves. The hunter simply locates a corn crop or hickory grove where the critters are feeding and gets there before dawn to wait. On good mornings he might collect his limit before breakfast. By November the feeding sprees in cornfields and at hickory groves are long over, and other hunting methods are indicated. One is to locate a well-used den tree and take a stand before dawn or in late afternoon. The squirrels will be leaving their dens in the morning and returning to them late in the day. The shooting may not be as fast as it was in September, but the well-concealed hunter should take some game—and the hunting is more challenging.

Someone has said that the big difference between big-game hunting and small-game hunting is the travel involved. The big-game hunter may travel to another continent and at the minimum across country, but the small-game hunter may do little more than leave his backyard. Other differences? The big-game hunter is seeking a trophy while the small-game fan is simply out there for the fun—and a rabbit or squirrel or two for the pot. That's small-game hunting—fun. □

*Bob Gooch is an outdoor columnist and has written many books on hunting and fishing.*

# Holiday Shopping for the Angler

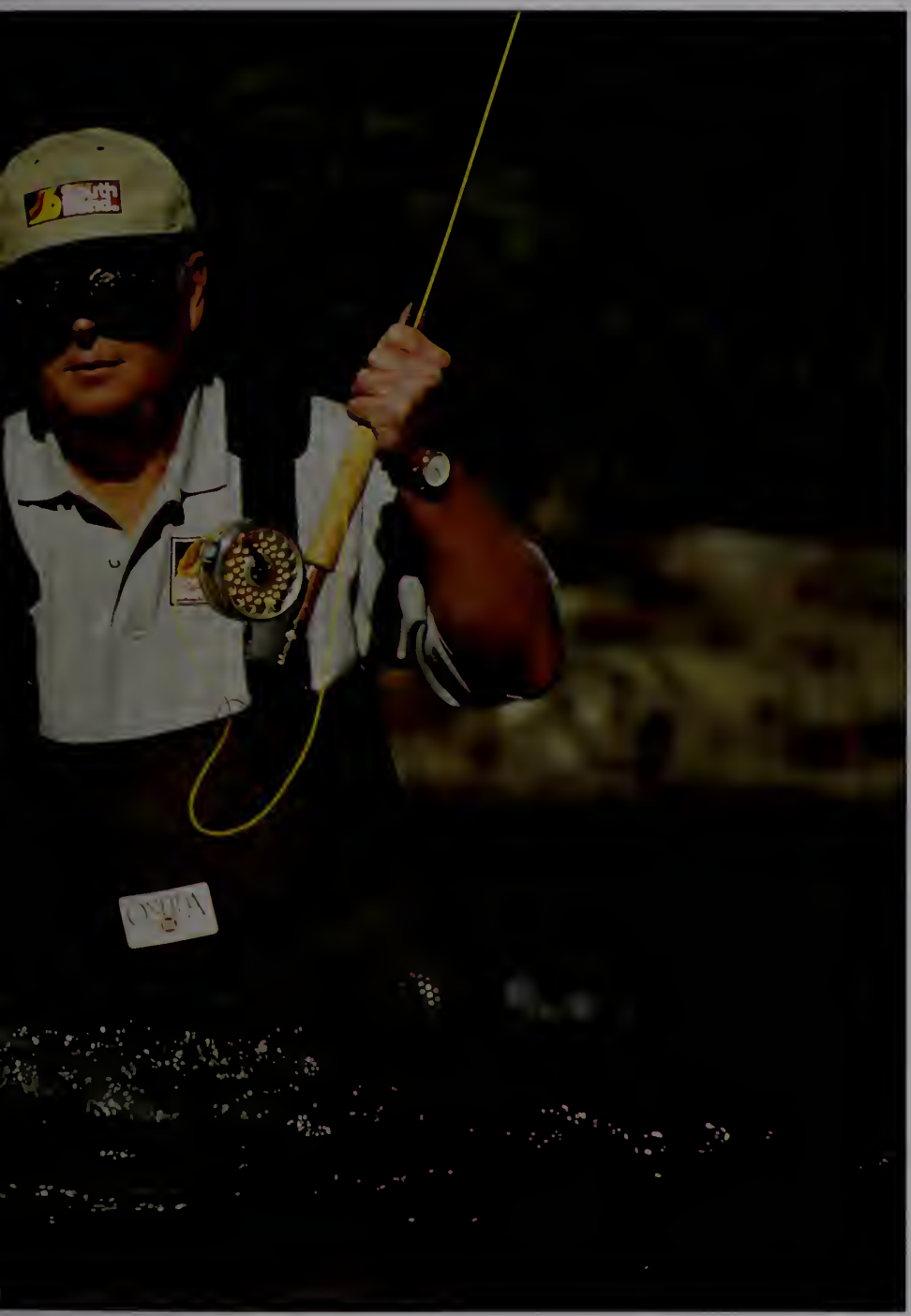
*A fly fisherman can never have too much equipment.*

by Harry Murray

Let's assume that you would like to get a meaningful gift for that angler or would-be fly angler in your life, but you know very little about the sport and would like to invest your money wisely in something useful.

I can assure you that you are not alone in your dilemma and that there are some basic guidelines which will enable you to select a gift which will be received with great enthusiasm and, yes, even amazement.

First, you'll need to determine if the angler's interest lies more in the direction of trout or bass. Or, if both species will be stalked. Probably the easiest way to resolve this is to ask one of his or her angling friends. Next, you need to decide how much you plan to invest in the gift, for this could be as low as a dollar or two for a stocking stuffer on up to as much as you would like to spend.



Once you've cleared these points, the following information will help you to wisely select a gift you're excited about giving.

A fly rod would certainly be a wonderful gift. If the angler is primarily interested in trout a good choice would be a rod from six and a half feet to eight feet long which will balance with a number three or four line. If bass are the quest a nine foot rod which balances with a seven or eight weight line is best. If one would like to go after both trout and bass with the same fly rod then an eight foot rod that balances with a number six line could be used. However, it will not afford the delicacy of the lighter rods for trout nor the capacity for the larger flies for bass which a more powerful rod would.

Information on each fly rod's line requirements and length are printed on the rods and in the distributors catalogs and help greatly in selecting the appropriate one. There are many fine fly rod builders presently in the country: some of the best known are Scott, Winston, Thomas & Thomas, Sage, Orvis, and Loomis.

Fly reels should be selected based on their line capacity, drag and prospective durability.

For the light trout rods we want a small reel which weighs from three to four ounces with the lightest possible starting drag.

A bass reel must have enough capacity for the larger diameter seven or eight weight lines and weigh from four to six ounces. A fancy drag is not needed on a bass reel since long fast runs are seldom the norm and besides our leaders here are quite strong. An elaborate drag on a bass reel may use up your money which would be better invested in a reel designed for durability. And, besides, an involved drag system makes the reel heavier. For example I have one reel I was given to test in my bass schools which has an outstanding drag that is capable of controlling a bonefish zipping across the flats of Belize with over one hundred yards of backing tethered to the line. This is great for my bonefishing but the reel weighs almost twice as much as my other bass reels and thus I seldom use it.

The durability of fly reels is usually determined by the price if all other qualities are comparable. More rugged materials, closer tolerances and quality workmanship are what your extra money is purchasing.

Some of the most popular fly reels are made by Hardy, Abel, Ross, Orvis, Loop, Ryall, Scientific Anglers and Lamson.

Fly lines are items all anglers need; just be sure they match the rod. Rods are labeled for fly line sizes from 1 up to 14 so if the line box is labeled with the same number as is on the rod you should be safe. There are three basic fly line designs which we call tapers that will meet all of our needs in Virginia. Those lines labeled DT are double tapered lines and afford a savings since we can reverse them on the reel when the front end wears out. The WF lines are constructed with a weight forward taper and permit longer casts than the double tapered lines. The ST lines are of a shooting taper design and by attaching them to mono or special running lines one can cast quite long distances.

Floating lines cover most of our needs. However, I do go to fast sinking tip lines (the first 13 feet sinks quickly) if the streams are high or cold.

Excellent lines are presently being built by Scientific Anglers, Cortland, Wulff and Teeny.

A good fishing vest is essential in order to carry all of the assorted items we need with us as we roam the streams. I personally want my vest to be constructed of very light material, to have adequate capacity and to be comfortable over both lightweight or heavy cloths. Years ago, Stan Hui who owned THE vest company became a very close friend and provided me with these vests to test with the goal of developing the best vest in the country. Because of our friendship and since they were free I used THE vest for many years. Only after I finally wore out the last one and Stan quit making them did I go to one of the new mesh vest. I was, and am still, amazed. Not only does my new mesh vest weigh just a fraction of my old vest, it is more comfortable and actually carries more equipment. Some of the most popular vests are made by Patagonia, Orvis and Stream Design.

A raincoat is an essential item for the angler. These range from basic vinyl ponchos to the modern waterproof-breathable designs. Here I firmly believe you get what you pay for. I would be far ahead financially if I would have purchased the premium breathable raincoat I'm presently using years ago instead of my other six raincoats, all of which caused me to get wet. Make sure your raincoat will fit into the back of your vest: in fact try the vest and raincoat back and forth as you are considering purchasing either or both. Many different raincoats are being made by Patagonia, Orvis, Cortland and Simms.

Wading gear makes a nice gift and is simple to select if you know the recipients sizes.

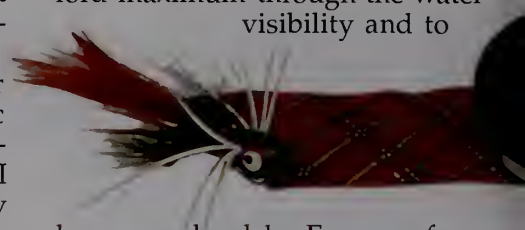
Felt sole hip boots will enable one to safely fish our small mountain trout streams and are purchased the same size as regular shoes.

Larger waters call for chest high waders, the most popular of which are the neoprene stocking foot design. These should be selected based on ones weight, shoe size and height.

Over the stocking foot waders in cold water and alone during the summer one wears a felt sole or, even better, the new metal studded felt sole wading shoes. I've used wading shoes constructed with numerous materials but for many years now I've settled on those built with what the manufacturer calls "man-made leather." I have no idea what the material is but they are very sturdy, comfortable and long-wearing.

A variety of wading gear is being made by Hodgeman, Orvis, Borger and Proline.

Don't laugh, but a good hat is very important to the angler. I realize that we would all be out of place in the Easter parade on Fifth Avenue in the Big Apple, but in addition to looking "sporty" our hats need to shade our eyes to afford maximum through-the-water visibility and to

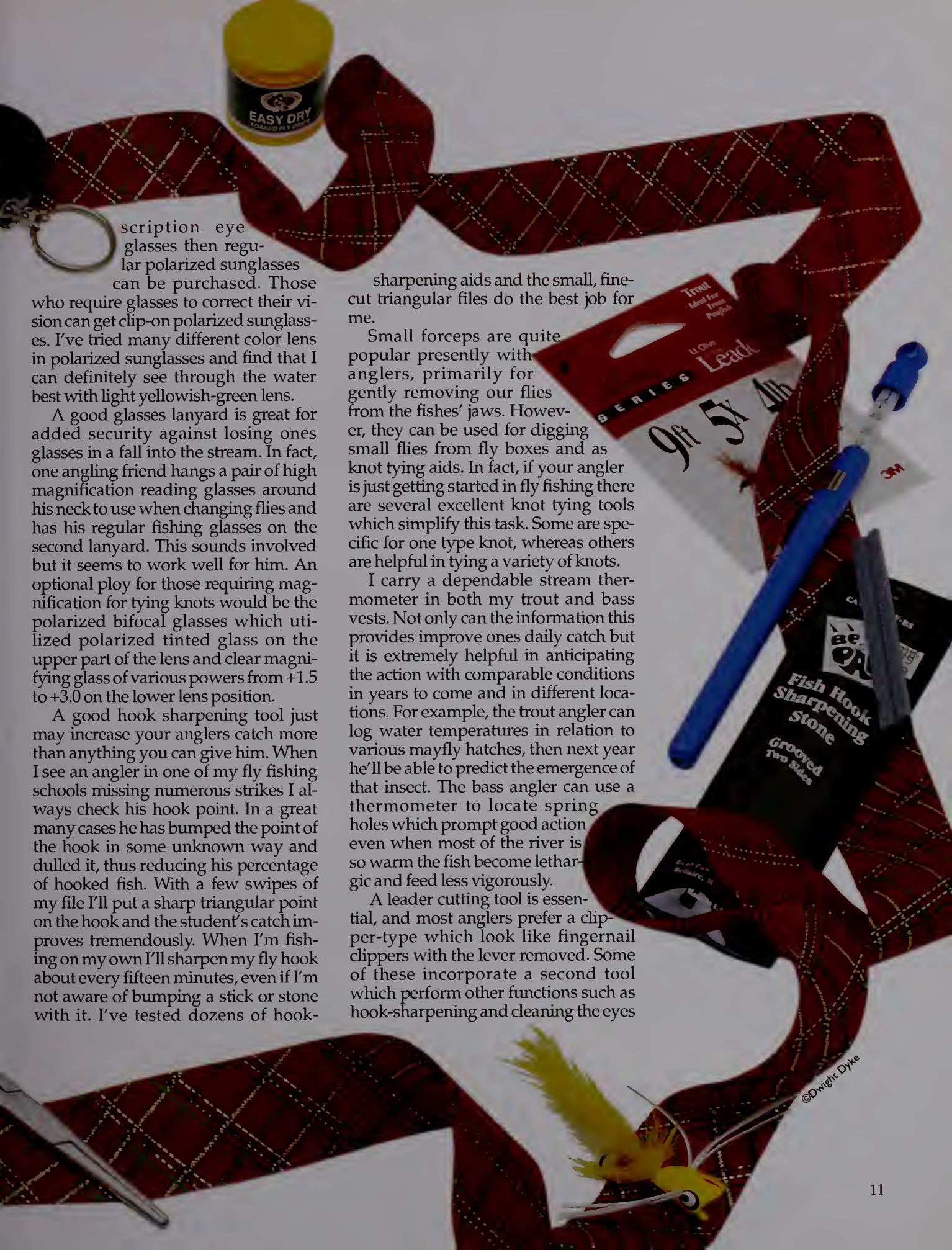


keep us cool and dry. Everyone from Southern States to Christian Dior makes hats so take your choice.

There are numerous items referred to casually as "gadgets" or, more respectfully, as "angling aids" which make wonderful stocking stuffers. Here, you can even duplicate something the recipient may already have for these have been referred to as "easily depleted toys." That is, we either loose them frequently or use them up. These are manufactured by numerous companies and are available from the suppliers listed at the end of this story.

A small water-resistant flashlight is something I never want to be without. I got lost one time in the Shenandoah National Park when I took what I thought was a short cut from the stream back up to my car on top of the mountain and had to make a long trek in the dark, not a very comfortable feeling in snake-season. I now carry a small anodized aluminum flashlight in both my trout and bass vest. Solitaire makes a dandy, one AAA battery, water-resistant flashlight.

Polarized sunglasses are a must for the angler. Not only do these help in spotting the fish, but they are essential in reading the water in order to tell where to fish. If one does not normally use pre-




scription eye glasses then regular polarized sunglasses can be purchased. Those who require glasses to correct their vision can get clip-on polarized sunglasses. I've tried many different color lens in polarized sunglasses and find that I can definitely see through the water best with light yellowish-green lens.

A good glasses lanyard is great for added security against losing ones glasses in a fall into the stream. In fact, one angling friend hangs a pair of high magnification reading glasses around his neck to use when changing flies and has his regular fishing glasses on the second lanyard. This sounds involved but it seems to work well for him. An optional ploy for those requiring magnification for tying knots would be the polarized bifocal glasses which utilized polarized tinted glass on the upper part of the lens and clear magnifying glass of various powers from +1.5 to +3.0 on the lower lens position.

A good hook sharpening tool just may increase your anglers catch more than anything you can give him. When I see an angler in one of my fly fishing schools missing numerous strikes I always check his hook point. In a great many cases he has bumped the point of the hook in some unknown way and dulled it, thus reducing his percentage of hooked fish. With a few swipes of my file I'll put a sharp triangular point on the hook and the student's catch improves tremendously. When I'm fishing on my own I'll sharpen my fly hook about every fifteen minutes, even if I'm not aware of bumping a stick or stone with it. I've tested dozens of hook-sharpening aids and the small, fine-cut triangular files do the best job for me.

Small forceps are quite popular presently with anglers, primarily for gently removing our flies from the fishes' jaws. However, they can be used for digging small flies from fly boxes and as knot tying aids. In fact, if your angler is just getting started in fly fishing there are several excellent knot tying tools which simplify this task. Some are specific for one type knot, whereas others are helpful in tying a variety of knots.

I carry a dependable stream thermometer in both my trout and bass vests. Not only can the information this provides improve ones daily catch but it is extremely helpful in anticipating the action with comparable conditions in years to come and in different locations. For example, the trout angler can log water temperatures in relation to various mayfly hatches, then next year he'll be able to predict the emergence of that insect. The bass angler can use a thermometer to locate spring holes which prompt good action even when most of the river is so warm the fish become lethargic and feed less vigorously.

A leader cutting tool is essential, and most anglers prefer a clipper-type which look like fingernail clippers with the lever removed. Some of these incorporate a second tool which perform other functions such as hook-sharpening and cleaning the eyes

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of flies. Some anglers use special small scissors to cut their leader materials. Many of these possess sections which are specially designed for mashing down and removing split shot.

Small retractor-reels are good gifts for we use these to attach our small tools to the front of our vests for easy access. I use three to which I attach my clippers, file and flat nose tweezers.

Leader straighteners are quite simple and inexpensive but they can make the anglers life much easier if he has trouble with curly leaders.

Small needle nose pliers are the easiest tool to use for mashing down the hook barbs. On many streams we are legally required to use barbless hooks in order to help assure minimal fish injury when releasing fish back to the stream. However, there are two other aspects in which barbless hooks are helpful. For example, frequently we practically destroy a delicate dry fly imbedded in the hard part of a trout's lip; here a barbless fly can easily be removed. Also, if one inadvertently hooks himself it is much easier, and considerably less painful, to dislodge a hook if the barb has been mashed down.

You can't go wrong in giving an angler fly floatant because we always seem to be using it up or losing it. I carry two different types on the front of my vest for easy access. I definitely prefer a liquid floatant for all of my hackled dry flies such as the Mr. Rapidan, since this assures complete waterproofing and hackle separation. Silicon creams, gels and sprays can actually matt the hackles. However, I do use a silicon cream on my hair trout flies such as Shenk's Cricket and on my deer hair bass bugs such as the Shenandoah Hair Popper. Dave's Bug Float is an excellent silicone cream.

Leader wallets are great gifts for the angler who either fishes a broad variety of waters or is just generally disorganized. A good leader wallet will enable him to store, file and organize his leaders in a neat system which will let him quickly recover the exact one he needs—even under the stress of a dense mayfly hatch.

Indicators, those little brightly colored patches of foam, putty, plastic or yarn, are great aids for the angler in nymph strike detection. They function much like the bobber on a cane pole for the youngster fishing for sunfish. In fact, some traditional anglers feel that those using indicators, no matter how delicately they are designed, are not being fair to the fish. Such a refined English gentleman could remain quiet no longer in a seminar my friend Dave Whitlock was presenting on the use of indicators. "Mr. Whitlock," he exclaimed, "I feel you are taking an unfair advantage of the fish with those indicator-things. Just what is the difference in using those little orange pieces of foam on your leader and using a crude big old orange-painted cork?" Without missing a beat, Dave respectfully replied…"They sure slide through the fly rod guides a lot easier."

I've helped design indicators and have used dozens of different types and must admit I prefer those made by Scientific Anglers.

Most anglers like landing nets. There are many styles and materials used here, but you can't go wrong with a nice wooden-framed 21-inch model. The sac should be constructed with soft material so it will not injure the fish you release.

Flies always make good gifts and the catalogs from which you are ordering will have these grouped according to their uses. Frequently fly assortments can be purchased which will enable you to give a nice variety for a specific need. If you need assistance in making your selection just call the catalog distributor for help. They are quite familiar with their flies and will gladly aid you in making the best selection.

As you can see there are many items you can give your angling friends for Christmas. For as Dr. Jeff Harris of Winchester stated after purchasing tackle for a variety of conditions…"This sport sure is equipment intensive." Here are some of the catalog sources for fly fishing items which are useful in the Old Dominion. ☐

Dan Bailey's Fly Shop
P. O. Box 1019
Livingston, MT 59047
Telephone (406) 222-1673

L.L. Bean Inc.
Freeport, ME 04033
Telephone 800-221-4221

Murray's Fly Shop
P. O. Box 156
Edinburg, VA 22824
Telephone (703) 984-4212

Orvis
Market Square
19 Campbell Ave.
Roanoke, VA 24011
Telephone (703) 345-3635

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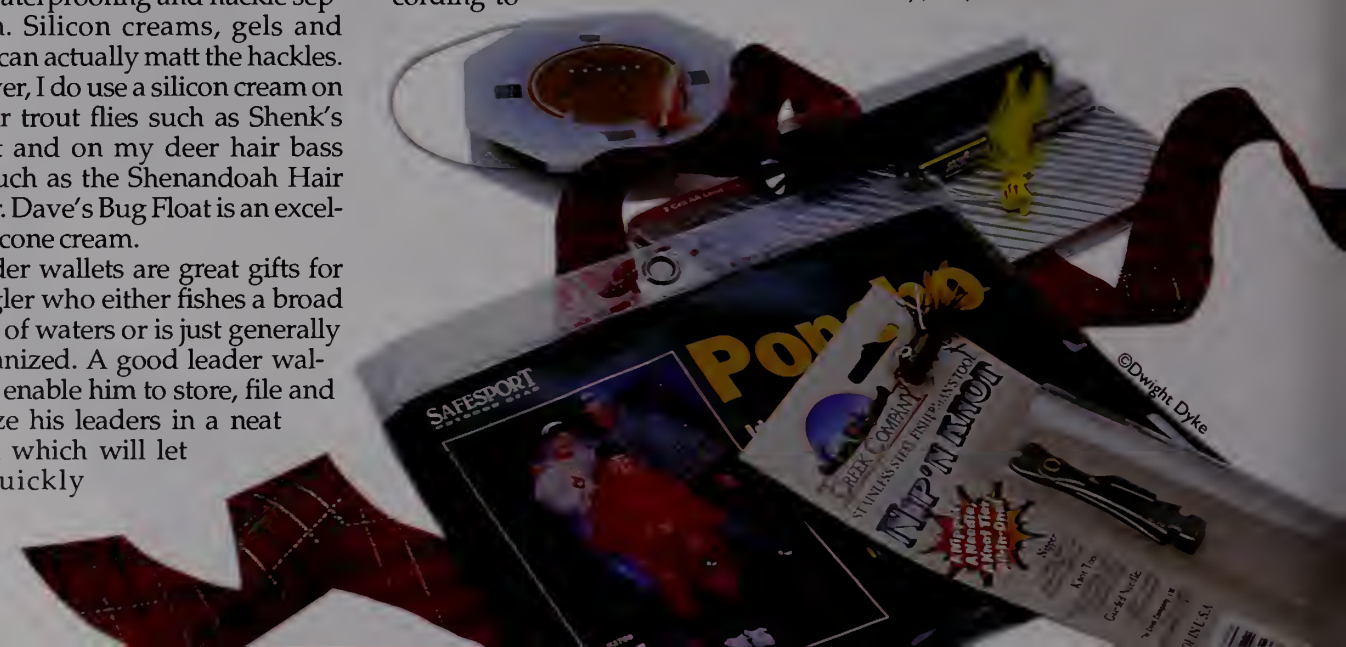
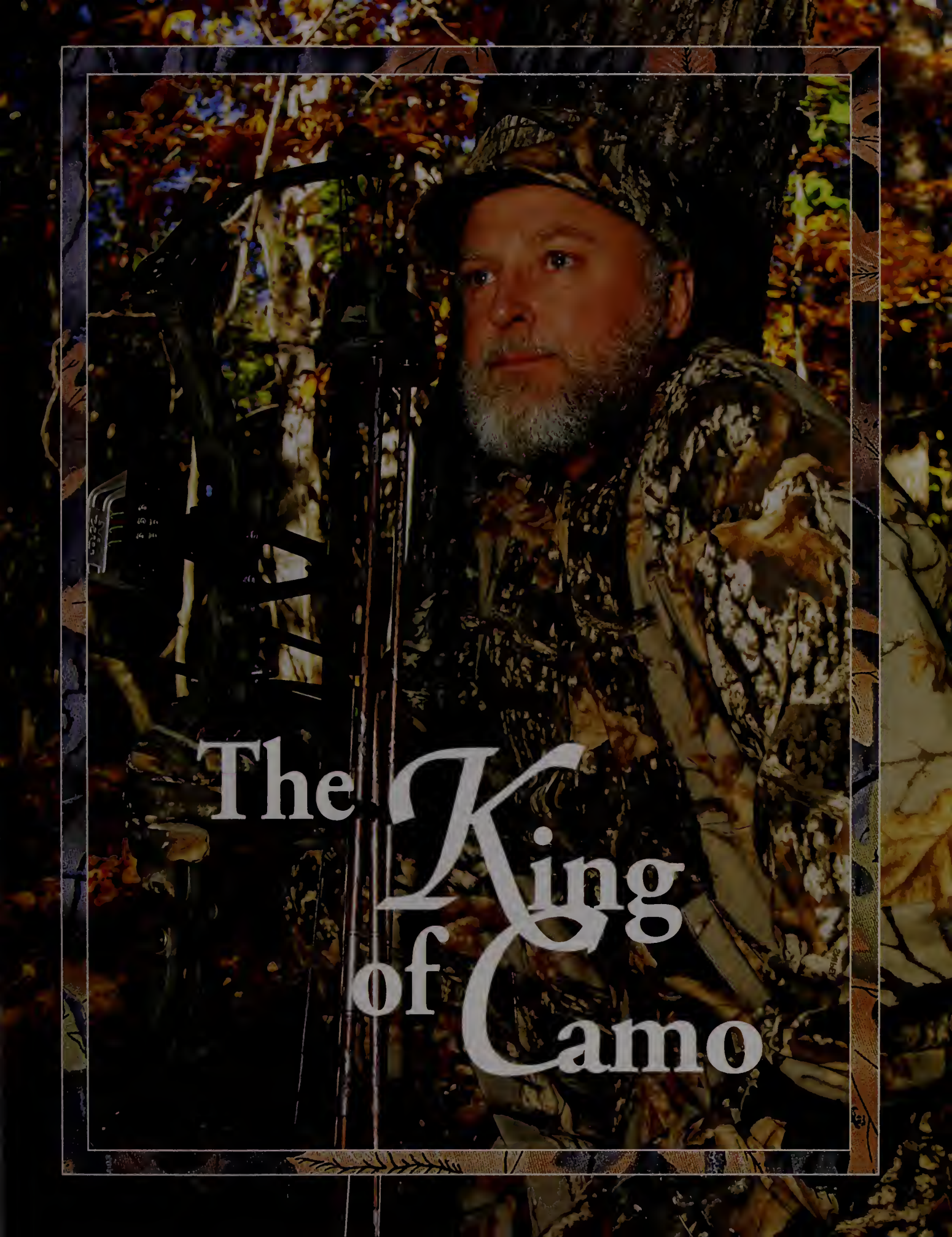
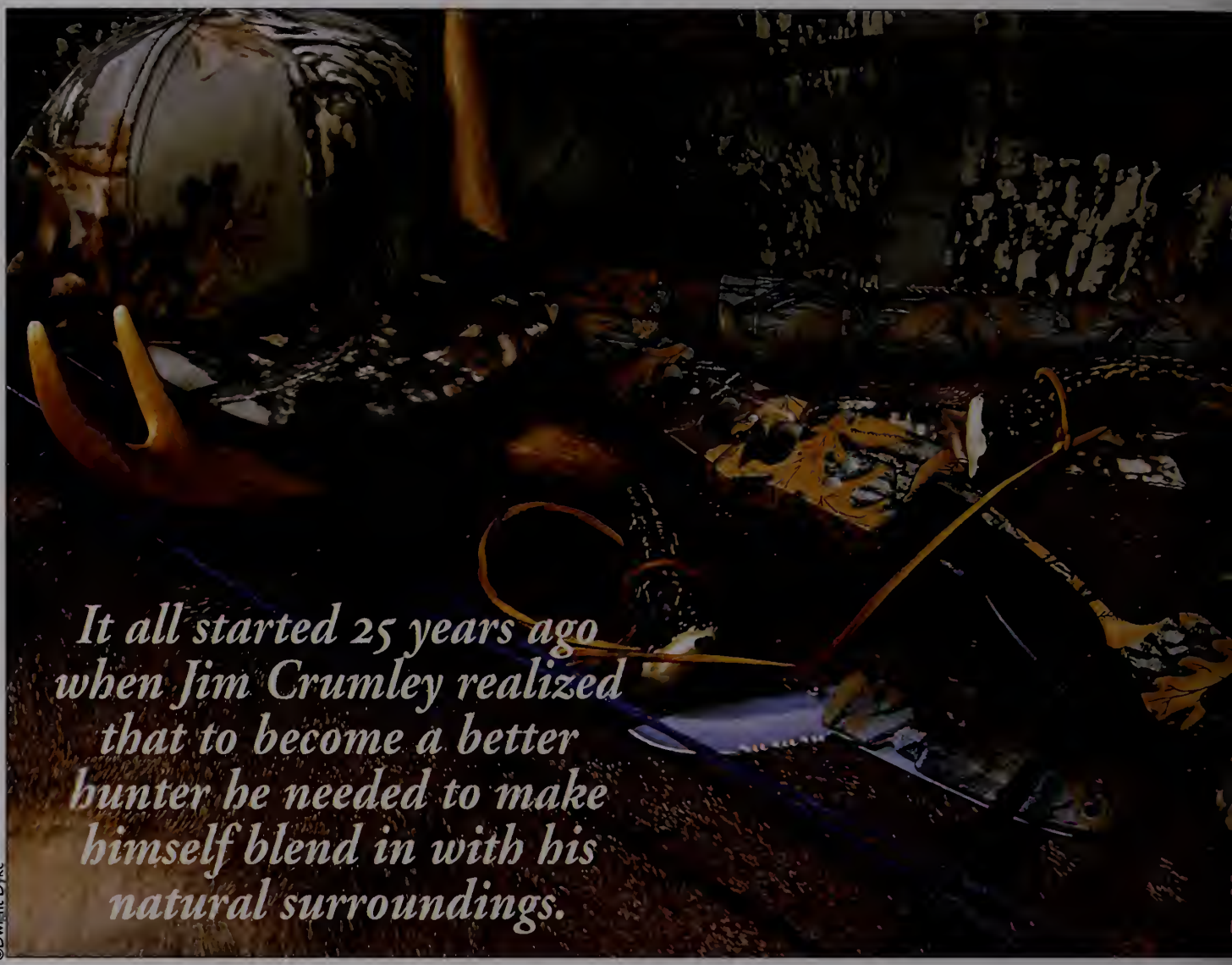
*Harry Murray is a freelance writer who teaches fishing and fly tying in Edinburg, VA Special thanks to Green Top Sporting Goods, U.S. Route 1 North, Glen Allen, VA, (804) 550-2188.*




The King of Camo



*It all started 25 years ago when Jim Crumley realized that to become a better hunter he needed to make himself blend in with his natural surroundings.*

©Dwight Dyke

by Bill Cochran

As far as turkeys, deer and other game animals are concerned, the human figure projects a lousy—even alarming—image. Jim Crumley, a Virginian, has dedicated much of his adult life to making outdoorsmen look more like trees than wildlife-scaring people.

Crumley is the "King of Camo," the man with the imagination, skill and determination to move the art of camouflage beyond the World War II jungle blobs and the Vietnam tiger stripes to a design patterned specifically for hunters, outdoor photographers and wildlife watchers in the woods and fields of Virginia and beyond. He calls his pattern, Trebark, a name that has become synonymous with camo and hunting.

For more than a decade, Trebark products have filled the shelves of hunting and fishing stores and the pages of outdoor catalogs. The concept has revolutionized what hunters wear afield and has sparked some serious, big-name competition. Chances are, if you do any hunting at all, you have Trebark in your wardrobe, or something similar. Hunting camouflage is big business.

It all began with a Magic Marker in the hand of Crumley in the early 1970s. Back then, Crumley was a high school marketing teacher in Alexandria and his passion was hunting. Even more than 25 years later, his story remains a fascinating saga, something of a rags-to riches affair, a "why didn't I think of that?" concept that projected Crumbly into a multi-million dollar business now headquartered along U.S. 220 in Roanoke County. "I got into it accidentally, because I love hunting," he said.

Early on, Crumley's passion was deer hunting with a bow and arrow, which meant an up close encounter with the game he pursued. Like

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*Top: Popular camouflage patterns like Jim Crumley's "Sniper" are being put on just about everything a hunter uses in the woods.* ***Above:*** *Jim Crumley.* ***Right:*** *Looking toward the future, Jim Crumley's wife Sherry, who herself is an accomplished hunter and vice president of Trebark, is constantly researching designs to help them stay in the forefront of the camo business.*

many hunters in the early 1970s, as well as their father's before them, he would use military surplus camo, with its large blotches of brown and its green tiger stripes, some of it designed for jungle warfare. But Crumley began to notice when he was afield that what he saw in Virginia's upland game habitat was the trunks of trees—oaks, hickories, poplars. More importantly, that's what deer, turkey and other wildlife saw from their eye level. The pattern was vertical and the predominant color during the hunting season was gray. When he climbed into a tree stand or pressed his back against the trunk of a white oak or walked through the woods, he realized his military camo was out of place.

"I just started feeling that there should be something that would make me blend in with that tree trunk rather than using the green military styles of camouflage on the market," he said.

So he walked from the woods one day and headed home with the idea of making himself look more like a tree trunk. That involved using Rit dye on gray Dickies work clothes and a Magic Marker to draw squiggle rectangular patterns that looked like the gnarled bark of a tree.

"I played around with that for literally 10 years, fully expecting to open an outdoor magazine the next hunting season and somebody else would be out with a similar idea," said Crumley.

That didn't happen, maybe because some of the friends who Crumley showed his camo to thought it was—well—ugly. There were even a few laughs, but when critics took pictures of Crumley in his camo creation standing against a tree, they had to agree he was blending in much better than with any other clothing. In time, some friends wanted to buy the homemade camo for their own use. Others began to urge Crumley to market the idea. Crumley continued doodling, but mostly was content to work on other aspects of his life. He received a master's in education from Virginia Tech, moved up to school management in Alexandria, bought a townhouse, found time to hunt deer and turkey and took up waterfowl guiding on Maryland's Eastern Shore. The combination of his professional background and his love of hunting—not to mention his courage—made him a natural to pull off the camo caper, but it wasn't easy.

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"Lend you money to make a man look like a tree?" scoffed one banker when Crumley sought to put wings to his dream. In time, he found a fabric mill willing to take on the job, but the minimum run was 50,000 yards at $3 per yard. You don't get that kind of money by guiding goose hunters or working in a public

school system. The obstacles were so overbearing it got to the point that Crumley couldn't sleep at night.

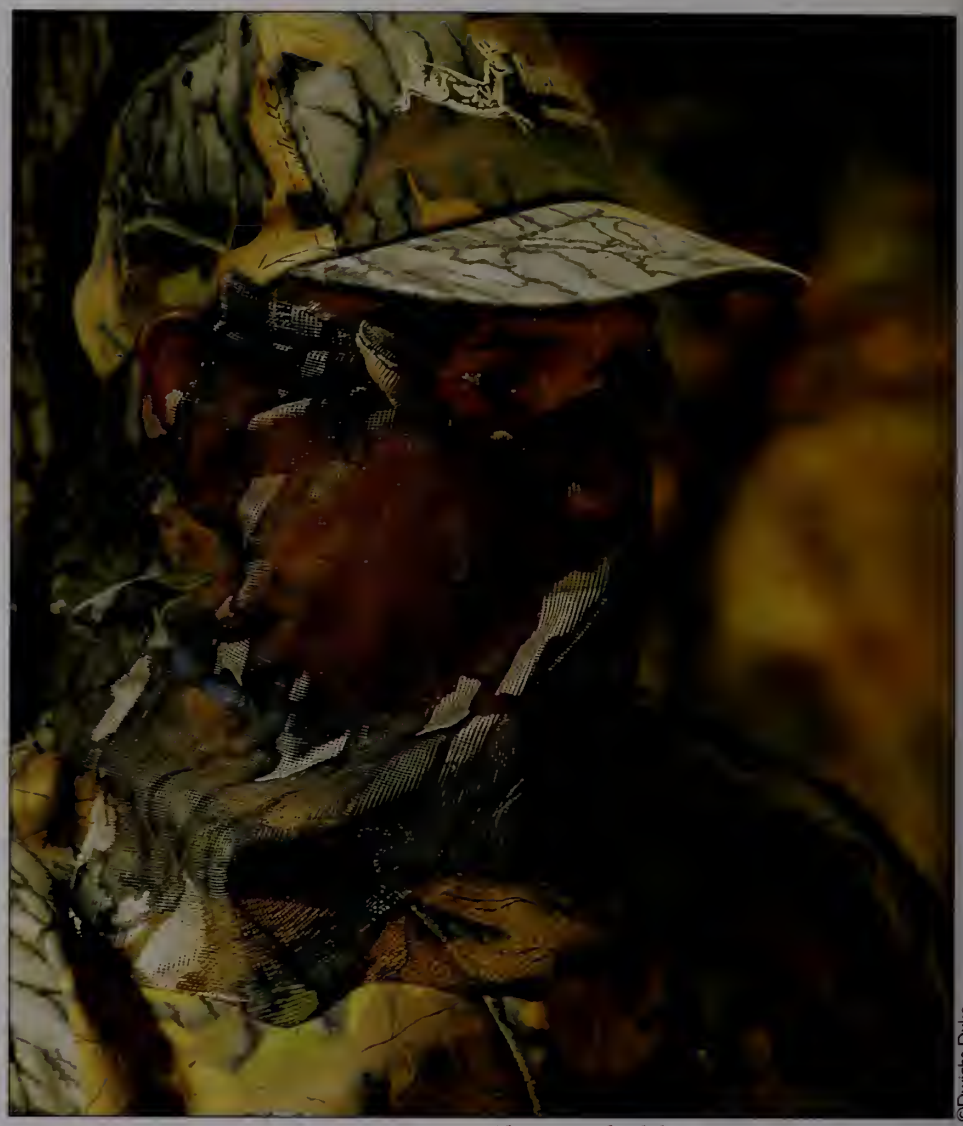
"So I second mortgaged the townhouse and got together a little bit of money," he said.

Following a three month search, he found a small drapery company willing to print 5,000 yards of material, if he paid them up front. He perfected some final camo sketches and took pictures of tree trunks, which he sent to his sister, Mary Beth, a commercial portrait artist. She used water colors to refine the pattern and shape it into a form that a textile manufacturer could use.

With the fabric in hand, Crumley found a shop willing to make 1,000 jackets and 1,000 pants, along with some hats. He named the design Trebark and ran a small advertisement in the July 1980 issue of *Bowhunter* magazine. The ad was nothing fancy, just some black and white pictures of the pattern itself, but it caught the fancy of the readers of *Bowhunter*. In a few weeks, the jackets and pants, which were priced at $19.95 each, had sold out. Crumley was on the way. Or was he?

Some of the first outfits sold were mailed back to him. "These guys would open it up in their living room and say, 'Gosh! What is this?'"Crumley recalls. "They would pack it up and send it back. I would send it back to them and say, 'Wear it this hunting season. At the end of the season if you truly believe it is not what you want, then send it back.' We've never had any returned."

A year after the *Bowhunter* magazine ad, Crumley left the school system. That meant no health insurance, no retirement plan, no security —just camo and hope. He set up a booth at the SHOT show, a national hunter-shooter trade display, and got an order from Cabela's for 2,400 pieces of Trebark clothing. It was to be a market test by the national catalog outfit, and Crumley was told delivery could be made in three shipments. But when the fall Cabela's catalog came out, demand was so great for Trebark outfits that Cabela's wanted the entire order at once. Meeting the demand proved to be a nightmare for Crumley.



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***Above:*** *Trebark has a new design called Trailcover. Jim refers to the pattern as having "photorealistic details."* ***Right:*** *The original Trebark design seen here, was developed to mimic the vertical and predominant patterns found in trees, along with their colors during hunting season.*

Even more unnerving was the onslaught of imitators who had grabbed Crumley's concept and were marketing products of their own. Crumley went to court in an effort to protect the patent and copyright he'd earned. This required so much time and money that he decided to dwell on competition rather than courts.

By 1989, he had his own catalog business, and had moved his operation to Roanoke County where he established a mail-order warehouse and a 10,000-square foot retail store he continues to call Trebark Outfitters. Along the way, he married, Sherry, a childhood friend from his hometown Bristol. It easily was the best move he'd made.

His new wife had experience in sales and quickly became vice president of the business. Sherry Crumley is an accomplished hunter and one of the finest ambassadors the sport has. She is a board member of the National Wild Turkey Federation, past president of the Roanoke Chapter of the federation and active in the Becoming an Outdoors-

©Dwight Dyke

Woman (BOW) organization. Most recently, she joined a group of prominent Virginians as a board member of the new Wildlife Foundation of Virginia.

"I have a business partner, a hunting partner, a good friend and a wife," said Jim Crumley. It is not entirely a joke when he says people come up to him and ask: "Aren't you Sherry Crumley's husband?"

Through all the success, Jim Crumley never got a swelled head. He remains an easygoing, friendly, congenial man with an interest in young people and a smile that quickly flushes across his bearded face to hide a hint of shyness. The Crumleys live on a farm in Botetourt County, its border cut by the flow of the upper James River, the pathway of wood ducks and smallmouth bass. The land is dedicated to wildlife habitat. Sponsors of worthy conservation causes for turkeys, ducks and other wildlife are well aware of the Crumleys' interest in nature and their generosity, and they beat a path to their door during fund-raising events. One of the favorite auction items at the Roanoke Chapter of the Wild Turkey Federation banquet is a wild-game dinner at the Crumley's house, cooked and served by Jim and Sherry.

While the original Trebark pattern continues to be a best-seller, the Crumleys have introduced a variety of patterns with the realization that outdoorsmen aren't just concerned with concealment, but they also are fashion conscious. The camo business no longer is a Magic Marker or artist-concept affair. New designs are being developed from photos of tree leaves, trunks and branches—the habitat of wildlife. These creations have what Jim Crumley calls "photorealistic details." In the future, there may be a design and fabric that will give the hunter a chameleonic effect of changing to adapt to new conditions as he or she moves from, a light to dark situation. You can bet that the Crumleys will be in the forefront of any new products. ☐

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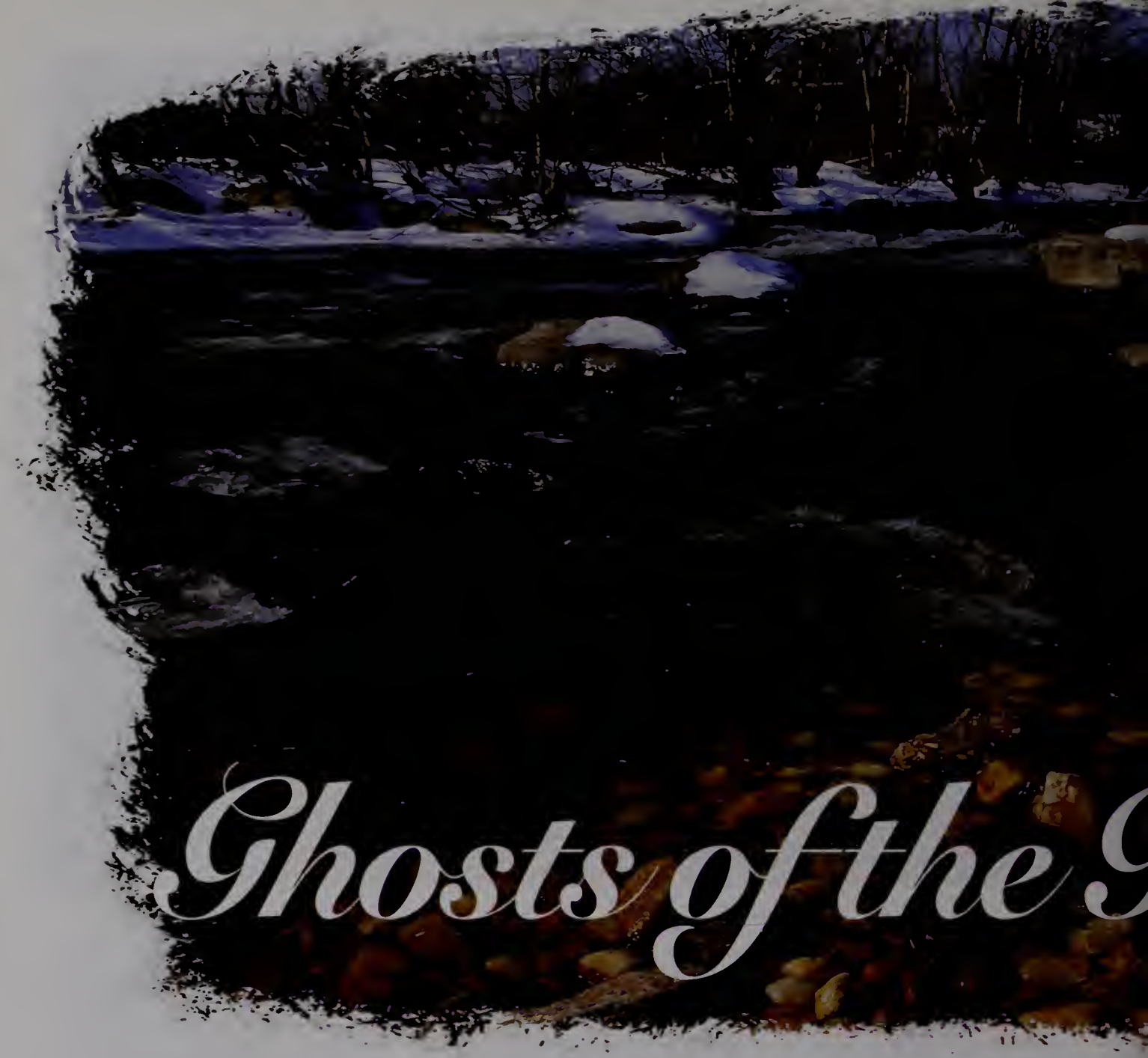
*Bill Cochran is the outdoor editor for* The Roanoke Times.



# Ghosts of the G

by King Montgomery

The small white flies hatching were accompanied by an eerie mist that wafted skyward in the early morning. The sun's first rays illuminated the beating wings of the mayflies as they struggled free from their watery birthplace; in a few hours or days, the river would be their tomb as well. I stood midstream, mesmerized by the combination of natural events flooding my senses, enhanced by the surround-sound of the gently flowing river. My fly rod, cradled in one arm like a rifle at rest, felt cool and damp. My gaze moved upriver and, with my senses following, I detected the subtle, yet distinct rumblings of a distant army on the move. I remembered that this area, so peaceful now, played a major role in the Civil War, 134 years ago. The ghosts from the past seemed very near today.

The upper Rappahannock River between Fauquier and Culpepper Counties, five miles north of its confluence with the Rapidan, was about a foot lower than usual because of lack of rain. "Rappahannock" in the Algonquin language means "rapidly rising and falling water." True to its name, last year it had carried too much water, causing extensive flooding; the year before, too. Who knows what this winter and next spring will bring. But today the fish-

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*The beauty of the Rappahannock River can only be matched by its history and great fishing.*

ing was good, and smallmouth bass, fallfish, rock bass, and numerous pumpkinseed, bluegill, and redbreast sunfishes rose readily to the fly. The aerial antics of the hooked bass were in contrast to the dogged runs of the bream.

Smith Coleman and I entered the river at the Rappahannock River Campground, near Richardsville, a 30 minute drive from Fredericksburg and further still from Smith's home near Port Royal. We were wading in shorts and light rubber boots with felt soles that grip moss-covered rocks, except the one that I slipped on and fell chest-deep in a hidden hole. The fish were taking surface flies; some sipped them like trout while others smashed them with abandon, sending water exploding upward in all directions. Fortunately, this was the most violent act this day, because we quickly and gently released all the fish we would catch.

Smith worked a muddler minnow on top, drying the fly with several false casts before shooting the line gently to the target. The muddler has been around for many years, but I fished a new topwater fly made of space-age material, closed cell foam, and feathers. The Prissy Miss popper was matching the old muddler minnow fish-for-fish; it was one of those days.

A river can be a barrier or a con-

nector, a deterrent or lifeline; its water can bring life or death, pleasure or fear. Fishing here today, the river provided more than an angling opportunity; its many faces glinted with the sun's reflections. And the surrounding woods, framing its borders, seemed full of shadows, gray shadows in the green trees that seemed alive...

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***Above left:*** *Civil war era cannons are silent now, but serve as a reminder of our past.* ***Above:*** *Several species of sunfishes thrive in the clean water of the Rappahannock River.*

*In mid-April 1863, General "Fighting Joe" Hooker's Army of the Potomac moved south across the Rappahannock in an attempt to flank General Robert E. Lee's smaller and more dispersed Army of Northern Virginia. Hooker had replaced the hapless Ambrose Burnside who, after his latest debacle at Fredericksburg in December 1862, was known for "snatching defeat from the jaws of victory." Lee and his trusted and most able corps commander, General Thomas J. "Stonewall" Jackson, led their outnumbered and outgunned forces to a stunning victory at the battle of Chancellorsville. Routed by the gray clad Confederates bursting on them suddenly through the forest, the Federals had to retreat back across the Rapidan and Rappahannock in early May.*

The shadows resumed their natural form; the drums I thought I heard were nothing more than the water's flow against a hollowed-out tree that was wedged in the river along the far bank. "Another one," said Smith, who had moved upstream a bit and switched to a black, beadhead woolly bugger. I reeled in my line, moved up to him, and handed him my net, which soon held a fat smallie. "They are still holding along the seams between fast and slower water," he explained. "But they've gone deeper and won't come up for the surface flies." Smith knows these things because, in addition to being a school teacher, he is an angling guide and fishing instructor based out of Fredericksburg. I clipped off the popper and tied on a white, iridescent Buggs Bunny, a beadhead streamer fly tied by my friend Jim Brewer, editor of the *Virginia Outdoor Weekly* newspaper.

I cast it upstream where a pocket of emerald-green plants grew beside a current break, retrieved and mended the line to keep it as tight as possible. When the fly passed near the vegetation, a bass took it and tailwalked across the water. I always get a thrill catching smallmouth bass. Inch-for-inch and pound-for-pound, they are the fightingest fish that swims, and they live in some very beautiful places.

The Rappahannock River flows almost 185 miles from its spring-fed source on the eastern slope of the Blue Ridge Mountains in Fauquier County to the Chesapeake Bay at Stingray Point and Windmill Point. At its beginning, the river bubbles up from the limestone, gurgles along while slowly building size and velocity, and arrives at its terminus almost four miles wide. It has many faces over its winding course, from babbling brook to scenic stream to tidal river below the fall line at Fredericksburg to saltwater as it nears the bay. And, fortunately for the fish and wildlife within its influence, the Rappahannock runs relatively free and clean over its entire course. Only one small dam of questionable value above the city of Fredericksburg interrupts its flow and blocks migrating fishes from their traditional spawning grounds. Still, it is one of the most unspoiled rivers on the East Coast. And its vibrant life-force seems to connect time as well as terrain, carrying me back to the river's role in a nation's search for identity and definition.

Could Jackson's river marking heaven's boundary be the Rappahannock? It is a beautiful, unspoiled place that supports a diverse population of plants, from the simplest mosses and lichens to stately oaks and pines, fish of many kinds, and game and nongame species of animals. Its winding track is home to bald eagles, blue herons, kingfishers, and ospreys. Smallmouth bass, sunfishes, catfish, fallfish, suckers, and chubs swim its clear waters, while deer, turkey, foxes, and raccoons ply its banks and drink its wa-

*On the night of May 2, 1863, after his brilliant flanking maneuver turned the tide of battle against the surprised Army of the Potomac, "Stonewall" Jackson was mistakenly wounded by a picket of his own men. He was taken to a field hospital at Wilderness Tavern, and placed in the care of his friend and corps surgeon, Dr. Hunter McGuire. Jackson's left arm was amputated and, for the next several days he seemed to be recovering. Shortly after being moved to Guinea Station, 10 miles south of Fredericksburg, the General developed pneumonia, for which there was no cure at that time. Despite the best efforts of Dr. McGuire, Jackson died on Sunday, May 10. His last words were, "Let us cross over the river and rest under the shade of the trees."*

ters, and ducks and geese abound. Near Kelly's Ford, the river forms the western boundary of the main part of the C.F. Phelps Wildlife Management Area.

The management area comprises 4,539 acres and offers fishing, hunting, wildlife viewing, and hiking. Deer and turkey populations are good, and the acreage supports small game species such as doves, rabbits, quail, and squirrels. The three-acre pond on the Phelps area has largemouth bass, bluegill and redear sunfishes, and channel catfish.

The Rappahannock River runs through the northern part of the management area, and along the western boundary in the larger part to the south. This is prime water with its runs, riffles, and pools for smallmouth bass, the sunfishes, and the aggressive fallfishes. A small boat ramp is located on the Culpepper County side of the river at Kelly's Ford. The ford was a major crossing site used by Union forces at the Chancellorsville battle.

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***Top:*** *Fly fishing for smallmouth bass often lures anglers like Smith Coleman, to the Rappahannock.* ***Above:*** *Smallmouth bass flies for the Rappahannock river cover the water from top to bottom.* ***(Left to right)*** *Hair Frog, Dahlberg Diver, Lefty's Deceiver, Leadeye Leech.*

Smallmouth bass, various sunfishes, and fallfish kept taking the streamer flies as the sun rose higher in a brilliant blue sky punctuated occasionally by puffy white clouds. Anglers using spinning and spincasting gear can catch fish on the Rappahannock with topwater lures early and late in the day, spring through fall, and with spinners or plastic worms and grubs during periods of bright sunshine.

Around noon, Smith and I waded back toward the canoe launch ramp, talking about the river and its role in the American Civil War. Before turning inland toward the truck, I paused on the high bank overlooking the river. There were no sounds of fighting now, but I felt a brief sensation—a taste of gunpowder, adrenalin, bile, and fear, that I had experienced 29 years ago as a young infantry officer in Vietnam. The feeling passed and was replaced by one of peace, caused partly by the sight, sound, and feel of the Rappahannock River, and partly by knowing we are all free today because of the sacrifices of others before us.

"By the way," said Smith as we approached his Jeep, "my great-great uncle was Dr. Hunter McGuire, "Stonewall" Jackson's chief medical officer." I paused and thought I saw the shadows move once again along the river and in the trees, and the ghosts of the past flickered at the edge of consciousness. For many, this is their final resting place, their home; we would do well to remember it. ☐

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*King Montgomery, an award-winning outdoor writer and field editor for Virginia Outdoor Weekly, is a regular contributor to* Virginia Wildlife.

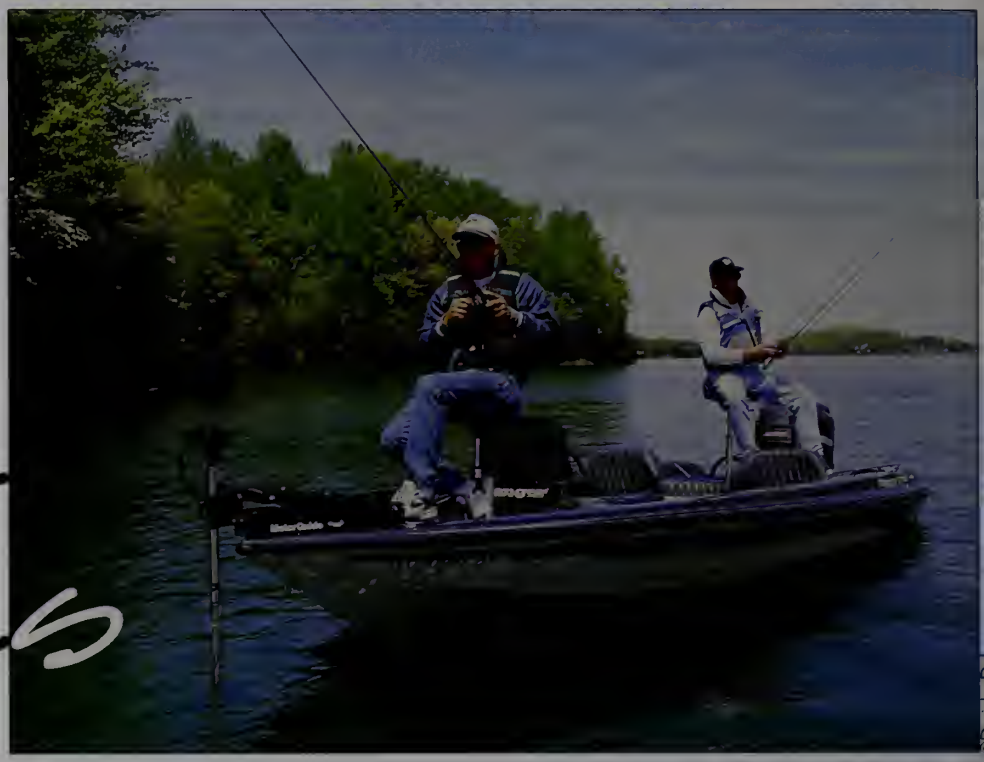
*Smith Coleman teaches fishing and guides on the Rappahannock River and other area waters. Call him at The Rappahannock Angler (540) 786-3334.*

*The Rappahannock River Campground has camping sites, canoe and kayak rentals, and a canoe launch site on the river. For more information, call 1-800-784-PADL.*

*Rappahannock River canoe and float trip access points are listed in the June 1997 issue of* Virginia Wildlife.

*The* Virginia Outdoor Weekly *is published 50 times a year in Charlottesville. Call (804) 964-1620 or E-mail vaoutweek@aol.com for more information.*

# Forget the Cold and Shop Now for GREAT DEALS



*As these bass anglers show, manufacturers are now designing various styles of boats to fit the needs of every kind of fisherman.*

by Anne Wemhoff Nagro

During the dregs of winter, boating on Virginia's bountiful waters is just wishful thinking.

Fortunately, it's never too early to get a jump on the season, especially if you're planning to purchase a new boat or personal watercraft. Whether your pleasure is water-skiing, bass fishing, jet boating, kayaking whitewater, or cruising out in the Chesapeake Bay, the months of December, January and February are prime times for boat shopping.

Price incentives are the most obvious advantages. The model year for many power boats changes in early August, so it's likely dealers will have purchased 1998 models before the 1997 models are cleared out, according to Frankie Beck, general manager at Pleasure Marine in Richmond which specializes in SeaRay and Boston Whaler brands. This carry-over inventory, he says, can prompt lower prices from manufacturers in fall and early winter.

Buzz Kraft, owner of Adventure Challenge in Richmond, agrees. Canoes and kayaks don't change by model year, pricing does. "Generally, prices go up the first of the year," says Kraft, who conducts kayak and canoe lessons and tours; however, many paddle boats are discounted out of season. In winter, many dealers' sales have slowed. Christmas is a good reason to promote sales, he adds.

While excess inventory and price advantages hold true for most boats and personal watercraft, when it comes to yachts, winter buying has another allure.

"When do you want your boat?" asks Jerry May, owner of Deltaville Yachts in Deltaville, a noted Beneteau sailing yacht center. Boats larger than 28 feet and special-order craft require long lead times for delivery.

"With large boats, the biggest thing is availability. If you order by January, you'll have it in the water by spring," affirms May.

Now also is the time to investigate your options. Boat shows are an ideal way to see what's new. "It's the best way to look at boats and compare models, accessories, and price," offers Ed Rhodes, Region III Director and State Conservation Officer for the Virginia Bass Federation.

"So many manufacturers are represented," he adds. "You can get catalogs from each company you're interested in buying from." These reference materials can help prospective buyers decide on seating configurations, engines, option packages and other accessories.

"It's important, however, to shop for more than price, reminds Pleasure Marine's Breck. "In addition to the boat, what else are you buying?" he questions. Service and quality play heavily in the equation. These two important values go a long way in making boat ownership pleasurable and hassle-free.

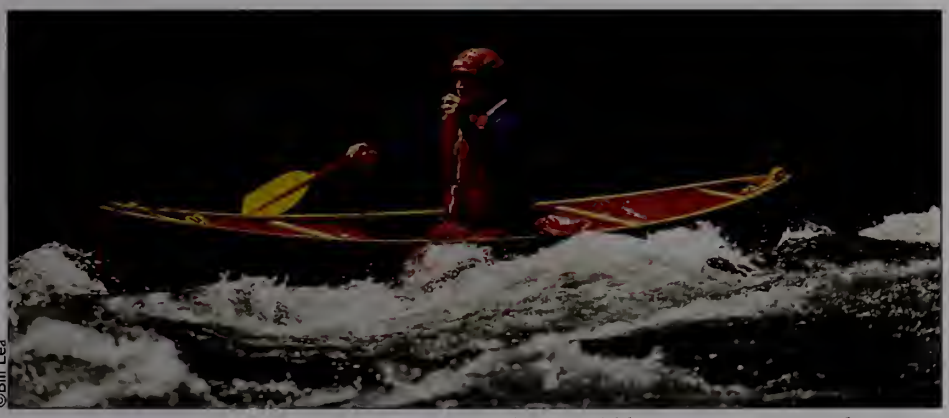
Breck also recommends buying from a dealer in the community in which you live. Trailering your boat across the state for warranty work has its drawbacks. And, you may be in for a wait by using a local dealer for service only. "I take care of my customers first," says Breck, voicing a sentiment shared by most dealers.

Sometimes it's more beneficial to negotiate for non-cash incentives, he suggests. For instance, he often

gives customers free covered storage for boats purchased in fall and winter. This saves the customer money spent on boat slip rentals and soundly protects the new investment from inclement weather until spring.

Excellent deals on used boats abound in winter as well. "December, January and February are good times to buy," confirms Deltaville Yachts' May. "Many owners looking to sell do not want to carry costs through the winter," such as monthly boat payments, slip rental, insurance and maintenance costs.

"Fewer people are buying, so better deals are available," agrees Adventure Challenge's Kraft. For paddle boats, investigate schools and liveries, which often sell used equipment in winter. "After just one year of use, the equipment is still a good value."



©Bill Lea

*It is a good idea that no matter what boat you decide to buy, that you first familiarize yourself with it, and then take a boating safety course.*

Changes to a sport's rules also can open the market for used boats. According to Virginia Bass Federation's Rhodes, the national Bass Anglers Sportsman Society (B.A.S.S.) is increasing its maximum horsepower rating to 235 hp. "There will be a lot of boats on the market next year with 150 hp engines," he believes. These craft more than meet the needs of recreational fishing.

When purchasing a used boat, *caveat emptor*, advises Breck. "Buy from a dealer or have the boat checked out by a dealer." Dealers have liability, he reminds. The consumer selling a used boat has none.

New or used, boats are sizable investments. Before you start comparing prices, be sure you fully understand your boating needs. This will help identify the best boat for you—not just the best deal, suggests Rhodes.

What water do you plan to sail, cruise, fish or paddle? An inland lake, reservoir, tidal river, Chesapeake Bay? Whitewater or calm? What type of fish do you plan to catch? What other activities do you plan to enjoy? Water-skiing, cruising, overnighting? With how many adults? Children? Each dictates a certain style of boat.

In addition, "find people who have the same or similar boat" and get comments, says Rhodes. What do they have to say about the handling, ride, motor, warranty, service? Are they satisfied with their boat? Why?

One of the disadvantages of winter boat buying is that taking test drives can be difficult. So before weather makes it impossible, ride with someone you know, or schedule an appointment with your local dealer. Definitely run a used boat before purchasing. If a test drive's impractical and a deal's too good to pass up, Breck suggests placing trust only in a well-known brand recognized for its high resale value, quality, handling and service.

Before buying their own kayaks, many novice paddlers will take lessons from Adventure Challenge's Kraft. "By taking a class prior to buying, they're more educated in the boat buying process." In the summer, students take classes, and in winter many begin to shop for their own craft. A universal boat truth: "After you sit in one for two days, you know what you want," says Kraft.

Finally, everyone agrees that the best way to ensure a fun time on the water is to take a boater's safety course. Whether you're a first-time boat owner or a seasoned pro, a refresher in safe boat operation can make the difference between an enjoyable outing and a tragic one. "I highly recommend a boating safety course," Rhodes implores.

Free safety classes are available for all watercraft, from increasingly popular paddle sports and personal watercraft to wind- and gas-powered boats. Call the Virginia Department of Game and Inland Fisheries at (804)367-l000 for information on classes being held in your community.

See you on the water! ☐

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*Anne Wemhoff Nagro is a freelance writer from Virginia's Middle Peninsula.*

## It's a Really, Really Big Show

Boat shows offer a fun way to compare makes, models and accessories side-by-side. Plus you can gather various manufacturers' catalogs and spec sheets to help you match options with your boating needs. Here are some of the shows taking place this winter across the region:

Bassarama, Richmond, Virginia State Fairgrounds, Jan. 30-Feb. 1, 1998

Mid-Atlantic Sports and Boat Show, Virginia Beach, Virginia Beach Pavilion, Feb. 7-15, 1998

Bass Fishing Expo, Chantilly, Feb. 19-22, 1998

Richmond Boat Show, Richmond Centre, Feb. 19-22, 1998

Virginia Association of Marine Industries (VAMI) Boat Show and Sale, Hampton, Hampton Coliseum, April 17-19, 1998

# Secretary Recounts Four Years of Progress With VDGIF

The Honorable Becky Norton Dunlop,
Secretary of Natural Resources

During these past four years the Virginia Department of Game and Inland Fisheries (VDGIF) has refocused its personnel and resources on its core mission, working on behalf of the sporting men and women of Virginia to assure healthy and growing wildlife populations. Governor George Allen, an avid sportsman, has remained committed to keeping VDGIF as a department paid for solely by its users. This is unique among government agencies, emphasizing that those who buy hunting, fishing and boating licenses are citizens demonstrating their personal commitment to conserve and enhance the natural resources that provide enjoyment and sporting opportunities for them. VDGIF's funding formula places a burden on the sporting community but provides confidence and assurance that the department will stay true to its mission.

The Administration of Governor George Allen will be remembered for its achievements on behalf of Virginia's sporting men and women. Working together in partnership with individual hunters and anglers, various organizations that represent them and with the Virginia Department of Game and Inland Fisheries, we have initiated some great projects and advanced others.

Our accomplishments have been possible because of our operating principles for natural resources management.

The first principle is that people are our most important—indeed, precious—natural resource. People generate the necessary ideas for progress in natural resources management. People implement the plans and they enjoy the fruit of their labor. Virginia's hunters and anglers are the people who buy the licenses that provide the requisite financial support for VDGIF, and the department in turn manages fish and game for its paying customers. VDGIF provides information about hunting and fishing by way of printed and electronically published materials. The department offers a wide variety of programs and opportunities, such as the Virginia Women in the Outdoors program. Another initiative has been opening up more opportunities for the disabled.

We introduced a new junior hunting license in hopes of creating another means to school youngsters in the importance of hunting to wildlife management. Hunters under 12, hunting with an adult who has a valid license, are not required to have a license. This provision will help decrease the cost of getting youngsters to join the hunt and provides an opportunity for families to spend time together. Thanks to this license, future hunters will now have an easier time getting into the field.

The second principle is personnel is policy. Simply put, this means we must recruit the best talent to guide our agency, state personnel, academies and volunteers. VDGIF has outstanding leaders in our wildlife and fisheries divisions. Better fiscal management has meant that the fees paid to the department are used more efficiently. And most importantly, we have committed to reach out more effectively to the public.

Rich Jefferson

*Above: Just in time for the 1997 hunting season, VDGIF officials and local supporters dedicate the opening of the new disabled-accessible hunting trail at the Hogue Tract of the Phelps Wildlife Management Area.* ***Left to right:*** *Bob Henson, Marge Van Deman, Jim Scott, Becky Norton Dunlop, Tom Reese, and William Woodfin.* ***Right:*** *Secretary Becky Norton Dunlop at the opening of the new public boat landing on the North Fork of the Shenandoah river in Strasburg, Virginia.*

Because of the increased number of public input meetings, the public has more opportunities than ever before to give the department its viewpoint on vital wildlife and fisheries issues. And there is the Internet, which was added 18 months ago to the Department's communications arsenal. We know it serves the needs of the public as the VDGIF site is the fifth most visited web address among state agencies.

Progress with *Virginia Wildlife* magazine has been very satisfying. After years of losing subscriptions, that negative trend has been reversed as subscribers have increased by more than 33 percent in the past 18 months, to more than 40,000—for the first time in years!

We have made significant gains

Rich Cooley

for our game wardens allowing them to focus on law enforcement functions and service in the field. They now have the modern law enforcement technology they need, including mobile laptop computers extending the service they provide. Additional boats and jet skis have also aided our wardens patrolling the state's boatable waters resulting in safer boating.

A third principle is that renewable natural resources are resilient and inherently responsive to sound conservation management. Our rivers, our air, our forests, wildlife and fish are all dynamic and resilient. They are changing and constantly being renewed. Regarding game, great strides have been made in deer, bear, turkey and quail management. Thanks to aggressive management decisions based on biological data, record and near record harvests have been the hallmark of recent Virginia deer and turkey seasons. The Department has implemented a Quail Management Plan which is the best hope for quail survival and enhancement in Virginia.

When you establish bag limits for species, as the VDGIF does, and you see the numbers of hunted species increase as we have seen with deer and turkey—both of which were in danger of extirpation earlier in this century—you know that our resources respond to good management.

Fish management has also had success stories. The rebound of striped bass populations in the Chesapeake Bay and its tributaries, year round stocking of trout giving anglers 12 months of great fishing, and the best story, fish passage. The extensive fish passage efforts, made with coordination between the private and public sectors to breech the dams and provide a means for shad and other anadromous fish to return to some of their historical spawning grounds, as far inland as Lynchburg. You see, it's true that renewable natural resources really are inherently dynamic, resilient and responsive to conservation management. Don't believe the doomsayers!

Another principle of sound natural resource management is that a growing economy and a healthy environment are mutually dependent. Prosperity gives us the opportunity to do good things for the environment. Millions of dollars are generated by hunting, fishing and other outdoor recreations.

However, it's not just game species that have found a congenial environment in Virginia. It's not unusual to see bald eagles in Virginia now, and that's certainly a success story. Although many factors went into the resurgence of bald eagle populations, VDGIF certainly played a big role by working with private landowners to develop resource management plans aimed at helping bald eagles. Similar stories could be told about several other species that have benefited from our management efforts. With the rise of watchable wildlife as a tourist attraction, the rejuvenation of bald eagles in Virginia is a prime example of how a healthy environment and a growing economy are mutually dependent.

The Department of Game and Inland Fisheries has more than 1,250 volunteers statewide involved with its Hunter Education program, and volunteer instructors in other programs as well. Certainly without this level of commitment and volunteerism our Hunter Education program would not be what it is. With volunteers to teach in its programs, the Department can inculcate the values shared by ethical hunters, anglers and boaters—respect for private property, courtesy and civility toward our fellow human beings, and an emphasis on common sense safety in all situations, whether driving, walking down a public street or using firearms as they are intended to be used.

All in all, this has been an exciting and rewarding four years. The accomplishments and achievements are measurable. Our citizens have been well served. Our wildlife and its habitats have been enhanced. Our private partnerships have been rewarding and successful. Stay the course, and Virginia will continue to have bountiful natural resources and a growing population of citizen stewards. ☐

# Habitat

by Nancy Hugo

## Christmas Fern

In the woods, it is the things we can identify and name that give us the strongest sense of connection, and the Christmas fern is one of the easiest plants to identify in December. In fact, it's one of the easiest ferns to identify at any time of year, but it's even easier to identify in winter when the universe of ferns has been limited to those that are evergreen. What sets the Christmas fern *(Polystichum acrostichoides)* apart, in addition to the leathery texture of its leaves or fronds, is the shape of the leaflets that line its hairy stalk. If you look carefully at each of the frond's leaflets, you'll see that each one has a little protrusion or ear near the place where it joins the central stalk If you were to take this little leaflet off and rotate it 45 degrees, the shape of the leaflet would suggest that of a Christmas stocking, with the little protrusion as its toe.

Other defining characteristics of the Christmas fern are things like the two or more confluent rows of fruitdots (masses of spore cases) on the backs of its fertile leaves and the reduced size of the leaflets bearing these fruitdots. (These wizened leaflets bearing spore cases are on the upper portion of fertile leaves). But, even without knowing a spore case from a socket wrench, you can learn to find and identify the Christmas fern because not only is its shape and texture distinctive, it is common. You'll find it growing in every Virginia county in places like woodland slopes, along streambanks, and in other shaded or semi-shaded places. You'll even find it growing in gardens and in relatively dry soil because this is one of the most adaptable of all our native ferns. Although we tend to think of ferns as tender, delicate, and demanding plants, the Christmas fern is nothing of the sort, and I once heard a landscaper say that because he was finding it too much of a chore to water the begonias in one of his ornamental plantings, he replaced them with tough Christmas ferns! From an aesthetic point of view, the Christmas fern's only drawback is the fact that with the first frost its leaves go flat (they splay out as if they were on hinges), but in the spring the plant will send up new 1- to 2-foot fronds that grow in upright clusters from the central root stalk.

As abundant as they are, one would expect ferns to be an important wildlife food source, but according to Martin, Zim and Nelson, authors of *American Wildlife & Plants: A Guide to Wildlife Food Habits*, under ordinary circumstances, wildlife use ferns as food to a relatively minor extent. In winter, however, when other green plants are scarce, the evergreen Christmas fern reportedly "has considerable value" to wildlife. Deer and gamebirds are the principle users of Christmas fern fronds as food. Smaller birds reportedly use the white cottony substance on the uncurled fronds of some ferns as nest lining material.

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*Christmas ferns are commonly found throughout the woodlands of Virginia.*

Partly because they are non-flowering plants and stumped experts about how they reproduced for ages (it wasn't until 1848 that the mysterious process of their reproduction by spores was explained), legends and myths regarding ferns abound. Because it was believed invisible, fern seed was once believed to render the person carrying it [also] invisible. "We steal in the castle, cocksure; we have the receipt of fern-seed; we walk invisible," remarks Gadshill in Shakespeare's *Henry IV*. And there's a Christmas story that supposedly explains why ferns don't flower. According to this myth, ferns did flower before the birth of Christ, but on the eve of the Nativity, when all other plants burst into bloom, the fern alone did not. Hence, according to one naturalist, "the fern was condemned forever to go flowerless."

Once you begin to get to know ferns, however, you'll find them no less interesting for their lack of flowers. To get to know them better, consult a good field guide like Peterson's *A Field Guide to Ferns and their Related Families, Northeastern and Central North America* or join experts on one of the field trips sponsored by the Virginia Native Plant Society (call (804) 443-5950 for more information). Identifying ferns is easier than birdwatching because the ferns hold still, and because the number of fern species in Virginia (55) is relatively limited. So while you're in the field, give the ferns a closer look and see if you can't find some Christmas ferns as well as others that connect you to the woods. ☐

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*Nancy Hugo is the author of the newly published book* Earth Works, Readings for Backyard Gardeners. *Available through University Press of Virginia, 804/924-3469.*

Recipes

By Joan Cone

# A Venison Holiday Dinner

This is the perfect Christmas dinner. It is easy to prepare leaving you plenty of time for family and friends. By using your crockpot or slow cooker, you are assured a successful venison roast.

## Menu

*Oyster Stew*
*Venison Roast With Tomato Sauce*
*Honeyed Vegetables*
*Cranberry-Apple Mold*
*Pumpkin Silk Pie*

### Oyster Stew

1 pint shucked oysters with liquor
1 quart milk
¼ cup butter or margarine
Salt and pepper to taste
Seafood seasoning, if desired

In a 4-quart pan, cook oysters with liquor over low heat until edges of oysters just begin to curl. Add milk, butter, salt and pepper. Heat slowly until hot; do not boil. For an extra "zip," sprinkle seafood seasoning on each serving. Makes 6 servings.

### Venison Roast With Tomato Sauce
(For crockpot)

1 2 to 2 ½ pound boneless venison roast
1 tablespoon oil
2 stalks celery, sliced
1 medium onion, sliced
1 teaspoon minced garlic
½ tablespoon quick-cooking tapioca
½ of a 15-ounce can of Hunt's Ready Tomato Sauces Chunky Tomato
½ of a 6-ounce can tomato paste
1 tablespoon brown sugar
½ tablespoon Worcestershire sauce
Ground pepper to taste
4 cups hot cooked noodles

If necessary, cut roast to fit into a 3 ½ or 4-quart crockpot. In a skillet, cook roast on all sides in hot oil until brown. Place celery, onion and garlic in bottom of crockpot and sprinkle with tapioca. Place roast on top. In a bowl, combine undrained Hunt's Chunky Tomato Sauce, tomato paste, brown sugar, Worcestershire sauce and pepper; mix well and pour over roast. Cover and cook on LOW heat for 10 to 12 hours or until meat is tender. Transfer meat and vegetables to a platter. Pass tomato mixture with meat. Serve with noodles. Makes 8 servings.

**Note:** To freeze unused sauces, transfer to freezer-safe containers.

### Honeyed Vegetables

1 pound carrots, peeled and quartered lengthwise
1 pound parsnips, peeled and quartered lengthwise
3 tablespoons butter or margarine
3 tablespoons honey
2 tablespoons orange juice
1 teaspoon dried rosemary
Salt and pepper to taste

Preheat oven to 400°. Place carrots in a pot with just enough water to cover. Bring to a boil and cook until barely tender, about 3 minutes. Repeat procedure for parsnips. Drain and spread in a 9 x 13-inch baking dish In a small saucepan over medium heat, mix butter, honey, juice and rosemary. Drizzle evenly over vegetables. Sprinkle with salt and pepper. Bake until vegetables are glazed, 15 to 20 minutes. Makes 8 servings.

### Cranberry-Apple Mold

1 package cranberry-flavored gelatin
¾ cup boiling water
1 can (8 ounces) crushed pineapple, drained
1 can (16 ounces) whole berry cranberry sauce
1 red delicious apple, unpeeled and coarsely grated
1 tablespoon grated orange rind
⅛ teaspoon salt
⅛ teaspoon cinnamon
Dash of ground cloves
Lettuce leaves

Dissolve gelatin in boiling water and let cool. Stir in next 7 ingredients and spoon into a lightly oiled 4-cup mold. Cover and chill until firm. Unmold on lettuce leaves. Makes 8 servings.

### Pumpkin Silk Pie

**Crust**
1 cup quick oats, uncooked
¾ cup flour
½ cup butter or margarine, melted
¼ cup firmly packed brown sugar

**Filling**
2 packages (8 ounces each) light cream cheese, softened
1 can (16 ounces) pumpkin
1 ½ cups powdered sugar
2 teaspoons ground cinnamon
2 teaspoons vanilla
½ teaspoon ground ginger
½ teaspoon ground nutmeg
2 cups thawed light frozen whipped topping

Heat over to 375°. Lightly grease a 9-inch pie plate. Combine crust ingredients and mix well. Press firmly into bottom, and sides of pie plate. Bake 12 to 15 minutes or until golden brown. Cool completely on wire rack In a large bowl, beat cream cheese, pumpkin, sugar, cinnamon, vanilla, ginger and nutmeg on medium speed of electric mixer until smooth, about 1 or 2 minutes. By hand, gently fold in whipped topping. Spoon filling into cooled crust. Cover and chill 3 hours or overnight. Cut pie into wedges. Top with whipped topping and pecans, if desired Store tightly covered in refrigerator. Makes 8 servings. □

# DECEMBER Afield

by Jack Randolph

In many states December is a hunter's month, pure and simple, but it doesn't work that way here in Virginia. All sorts of sports pull at sportsmen, begging for their time.

Deer hunters have a right to claim December as their month, because the deer season, in some shape or form, is open all month. In the east the dog/gun season is open in most counties except the extreme southeast where the gun season has closed and the archery season opens. Bow hunting season also opens December 1 west of the Blue Ridge, to be joined December 15 with the opening of the western muzzleloader season.

Hunters who have fed turkey dogs all year have an opportunity to hunt with them from December 8 until January 3.

Next to the deer hunters the waterfowl hunters have a claim on December. The duck season remains open all month and waterfowlers hope to see a share of the predicted great fall flight come through the Old Dominion.

Last season the great fall flight wasn't all that great in Virginia. Many waterfowlers found their season condensed into a few days at the very end of the season.

While the mild weather that shut out the duck hunters was welcomed by other hunters and most fishermen, waterfowl hunters hope that this December is chilly enough to bring the fall flight into Virginia as early as possible.

Believe it or not, there are some fishermen who like their winters cloudy with snow. This learning process began in Germany over 35 years ago. According to German angling lore their huge river charr, the huchen, and their northern pike, or hecht, bite best in winter when the sky is lead-gray and the air is filled with snow. It was under such conditions that I hooked and lost my only huchen, but that's another story. However, the propensity of the pikes to bite best in winter is not restricted to the Old World.

It was in December of last winter that a Richmond angler caught three muskies from the New River and at least one other was taken in Claytor Lake by another angler.

Clicking through my memory banks I came up with some respectable pickerel taken in miserable winter weather while fishing Chickahominy Lake, Sunken Meadows Pond and other waters. It was during the last week of December last year that Reggie White of Richmond set a new state record and a 2-pound test world record with a pickerel caught from a Powhatan County pond. If pickerel, pike or muskies rank very high on your want list winter should be prime time to satisfy those wants.

For big winter pickerel I recommend Lake Cohoon in Suffolk, Little Creek Reservoir in Toano would be a good second choice. For northern pike nowhere in Virginia is really consistent, but Occoquan Reservoir or Hungry Mother Lake are probably the best bets. The New River ranks high for muskies, but Burke Lake in Fairfax is well endowed with these big fish. Claytor Lake and Smith Mountain Lake rank among other possibilities.

The comeback of striped bass has added months to the bay and ocean fishery. According to the experts we can look for 70 degree water on October 1, 60 degree water on November 1 and 50 degree on December 1. Last year the water temperatures at the Chesapeake Bay Bridge Tunnel hit the high 40's before December 1, but that hardly phased the stripers. On December 2 a 50 pounder was caught at the Bridge Tunnel and a week later the state record was shattered by a huge striper weighing 61¾ pounds which was caught by James Muse of Richmond while fishing out of Deltaville.

Striped bass fishing should remain hot all through December and, if it follows last year's pattern there will be a grand finale with big fish around Cape Henry at the end of the month.

Of course, we will also see schools of big bluefish on the inshore wrecks this month and as the water temperature drops those big speckled trout will commence taking angler's offerings near the "Hot Ditch" on the Elizabeth River.

Recently, "live lining" large live minnows has become a popular and highly effective method for catching bass and pickerel in the Chickahominy Lake. This method which calls for nothing more than a plain hook tied to the end of the line, usually on a spinning outfit, is lethal. All you do is hook a minnow through the lips and cast it out. Generally, each angler uses a couple of outfits.

Live lining is deadly on the Chickahominy, but it should prove to be an excellent method on other bass and pickerel waters as well.

December is also the month when we can expect humpback and fin whales to gather at the mouth of the bay. Last year there were few humpback whales in our waters, but there were some of the less spectacular, but much larger fin whales. Whale watching trips run out of Rudee Inlet at Virginia Beach and out of Hampton for very reasonable fees. Generally the trips start around the holidays, depending upon the availability of whales. The trips take only two hours and it is possible to combine an exciting family outing on the ocean with a great seafood dinner at a different season of the year.

This is, of course, the time of the year when we can pause to appreciate our loved ones, our homes and to be thankful for all of the delightful animals with which we share our lives and to wish each other a very merry Christmas. □

# Safety

by Kathy D. Gillikin, Boating Education Specialist

## Boating Wish List for the Holidays

About this time of year, people tend to get that wide-eyed look of desperation, scrambling to find the perfect gift for friends and family members on their gift list. As the month of December continues, the desperation grows until suddenly, time has run out and *something* must be purchased. Why not buy something that could be used year-round that keeps safety in mind?

Boaters and water enthusiasts will appreciate receiving any of the boating safety items that are required or recommended for a boat.

### Personal Flotation Devices (PFDs)

Life jackets or PFDs can be worn year-round for fishing, boating or hunting on the water. Did you know that 80 percent of the boating fatalities in Virginia could have been prevented if the victims were wearing PFDs? You couldn't find a better way to say, "I care," than by giving a life jacket to your loved one. Virginia and federal laws require wearable PFDs to be on board for all passengers and operators. They must be U.S. Coast Guard approved, properly sized for the wearer and in good condition.

Life jackets come in many different styles and colors in four wearable standard Coast Guard types: Type I, II, III and V. You will want to consider intended use, comfort, safety and personal preferences to help you make a decision. It is a good idea to look for 3 to 5 fastening straps and at least 15.5 pounds of buoyancy (22 pounds of buoyancy is better). Once you select the type you want, you'll need to look at the printed label on the jacket for weight allowances and chest sizes. Fastened jackets that can be pulled straight-up from the shoulders three inches or more are too big. A life jacket with a buoyant collar, grab strap and crotch strap perform better for children. Dark colored life jackets will be less visible in the water. Bright colors, such as yellow, orange, pink or lime, would be very visible to other boaters and rescuers.

Type IV PFDs are throwable floating devices that are not worn (cushions or rings). Motorboats 16 feet and longer must have a Type IV throwable on board in addition to the proper number of wearable life jackets.

### Type I PFD

- Off-shore life jacket with 22 pounds of buoyancy; vest-style with several straps
- Designed to turn most unconscious persons face-up in the water
- Best for slow rescue: open, rough or secluded waterways
- Bulky to wear
- Prices range from $15 to $100

### Type II PFD

- Near-shore buoyant vest with 15.5 pounds of buoyancy; collar/vest-style with 2-3 straps
- Designed to turn most unconscious persons face-up in the water
- Best for quick rescue: calm, inland waters
- Not very comfortable on the neck
- Prices range from $6 to $40

### Type III PFD

- Flotation aid with 15.5 pounds of buoyancy; vest or jacket style
- *Not* designed to turn an unconscious person face-up in the water
- Best for quick rescue: calm, inland waters
- Very comfortable for wearing all day and for a variety of sports
- Prices range from $20 to $100

©Dwight Dyke

### Type V PFD

- Special use flotation aid with varying amounts of buoyancy and manual inflation; vest, jacket or one-piece suit with manual inflation chambers
- *Not* designed for unconscious wearers
- Best for water sports and specific uses—must be worn to be legal
- Prices range from $30 to $200

### Other Safety Equipment

Listed below are additional safety items that would be good stocking stuffers or smaller gifts for active boaters.

- U. S. Coast Guard Approved Class B Fire Extinguisher
- Pea-less Whistle, Bell (7 7/8-inch diameter) or Air Horn (audible for 1/2 mile; capable of 4-6 second blast)
- U.S. Coast Guard Approved Visual Distress Signals (minimum of 3 flares)
- Powerful Flashlight/Lantern, 360 Degree White Light or Combination (red/green) Light
- Rope/Line (75 to 100 feet)
- Anchor (based on type of water floor)
- Tool Kit with Spare Parts
- Marine Compass ☐

Photo TipS

By Lynda Richardson

# Just Picture the Holidays

December is the time of year when families and friends get together and celebrate various religious holidays. Great feasts are prepared, homes are decorated and candles are lit. Presents are exchanged and pictures are taken to record all the joyous events. I thought a few tips on photographing during the holidays might ensure a successful photo session for all.

1) Reread your camera manuel. It's always smart to make sure you're up on all the functions of your camera and flash. Nothing is worse than..."ah, ah, wait a second, I forgot how this thing works...no, just wait, I'll get it in a minute...."

2) Make sure you have fresh batteries in your camera and your camera bag. If your flash takes batteries make sure you have extras for it as well. A small piece of tape wrapped around a battery will allow you to write that days date on it. This will let you know how long the batteries have been in your camera. If you are not planning on using your camera or flash for several weeks, I would recommend removing the batteries to prevent battery leakage. Batteries can be stored in empty film cans or plastic bags.

3) Have plenty of film on hand. Experiment with a roll of high speed film when shooting someone staring into the warm glow of a candle or sitting around a colorfully lit christmas tree.

4) Do you have to set anything on your camera or is everything "automatic?" I know several automatic cameras which are quite tedious in their setting requirements. Each subject must be reevaluated and the camera reset before each photograph is taken. If you don't pay careful attention, your portrait of Junior on Santa's lap may be out of focus because you forgot to move your camera setting from landscape to portrait or you forgot to turn on the flash.

5) Does your instant camera have a "fill flash" capability? Do you know how to fill flash with your SLR flash? Fill flash is very handy when photographing someone in the foreground but wanting to record the lower lit background as opposed to letting it go black. The fill flash programing in your instant camera should hold the background and lightly "fill" your foreground subject. Check your camera manuel to see how it's done with your camera. (The secret is lowering your shutter speeds to match the background.)

6) Left out of the holiday pictures every year? Use the self-timer on your camera. Set your camera on a tripod or sturdy object such as a table or stool and have your crowd pose leaving a spot for you on the end or in the middle. Compose the shot, leaving room for your up-coming appearance, of course, and hit the timer. You should have plenty of time to get in the photograph. Some cameras offer a remote release which will help you avoid running back and forth.

7) Don't skimp on film. Take no less than two or three pictures of each situation. You never know who will close their eyes or wiggle at the wrong moment.

8) Do you have several lines appearing in your viewfinder? It could be that the automatic lense which telescopes in and out of your camera only covers certain areas shown in the viewfinder. Check your camera manuel to make sure how your viewfinder works.

9) Carefully compose your photographs. Be mindful not to cut off peoples heads. Don't always place everyone smack dab in the center of each picture, try placing your subject on the right or left of the frame. Judge whether a photograph will be better as a horizontal or vertical.

10) Hold your camera properly. Make sure your fingers aren't covering important areas such as the lense opening, the flash or the infared sensor!

11) Plan for next year. Shoot holiday greeting cards for 1998 *now*!

Follow these rules and you should have a very successful holiday picture taking experience. Now, just picture the holidays!

©Lynda Richardson

Denny Martin

Lee Walker

*VDGIF Board Chairman, Charles G. McDaniel is presented with one of the first copies of "Spring Awakening" from artist Carolyn German Hall.*

# Spring Awakening

Inspired by the Cooperative Alleghany Bear Study (CABS), the nature of the black bear *(Ursus americanus)* is depicted in "Spring Awakening" by artist Carolyn German Hall. Virginia's nationally-recognized research on Alleghany Mountain bear populations is a joint venture among the Virginia Department of Game and Inland Fisheries, Virginia Tech, and the U. S. Forest Service. Through the CABS work, our emerging understanding about bears in Virginia will ensure the conservation of this magnificent animal into the 21st century.

Successful conservation programs are costly, and the CABS work is no exception. Despite the generous contributions that already have been made by other government agencies, private industry, sportsmen groups and conservation organizations budgets remain tight. It has been no small task to capture, mark, and release several hundred bruins since the study's initiation in 1994. Today, many of these bears are still being monitored with radio-telemetry equipment.

In 1996, Carolyn assisted Virginia Department of Game and Inland Fisheries (VDGIF) biologists with the trapping of a CABS study bear. The opportunity to see and help process a live bear reinforced her admiration for the largest of Virginia's carnivores and deepened her respect for the dedicated VDGIF and Virginia Tech staff conducting the work.

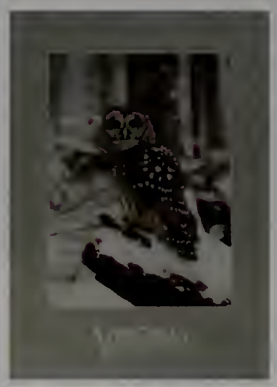
Carolyn wanted to contribute to the CABS project and to one of the Commonwealth's greatest legacies. To do so, she has painted a sow bear with two cubs just as they emerged from a winter sleep in a small cave where the cubs were born. Normally producing two per litter, a sow can give birth to as few as one or as many as five cubs. Carolyn felt that this scene most closely rendered her vision of this great animal. Just as a mother bear nurtures her cubs, Carolyn has exhibited similar care for all bears through her generous donation of "Spring Awakening" to the Cooperative Alleghany Bear Study!

Wildlife has been the subject of much of her work. Living on a wooded knoll near Lexington in Rockbridge County, she and her husband awaken to deer and wild turkeys in their front yard. Song birds, squirrels and other small animals are frequent visitors. Her work also has been featured in the May, 1991 issue of Virginia Wildlife.

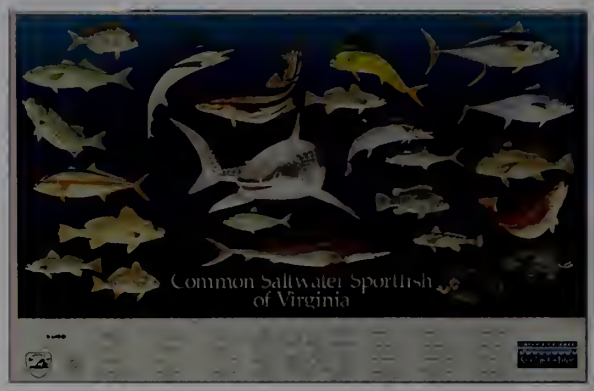
Through the purchase of a print (16"x20"), you can help Carolyn, sportsmen, and conservationists throughout Virginia ensure the future of black bears. *Signed and numbered prints are available for $95. For the collector, remark prints will be available for $125.* Proceeds from the sale of this print will be donated directly to the CABS project. This is the first edition of prints to be produced by the CABS project to help support the important work on Virginia's black bear population. These valuable and very collectable prints will be available in early November, 1997. You can show your support of *Ursus americanus* and receive one of these excellent prints by sending your check now. They would make an excellent Christmas gift. To order, please make out your check to the "Virginia Tech Foundation - CABS" and send it to Dr. Michael Vaughan, Dept. of Fish & Wildlife Sciences, Cheatham Hall, VPI&SU, Blacksburg, VA 24061-0321.

# VIRGINIA WILDLIF

Just $8 each. Specify: freshwater game fish (21"X 36"), wood duck, barred owl, white-tailed deer (all 19 ½" X 27 ½"), saltwater fish (21 ¾" X 34").
Make check payable to: Treasurer of Virginia and send to: Virginia Wildlife Poster Offer, VDGIF, P.O. Box 11104, Richmond, VA 23230-1104.



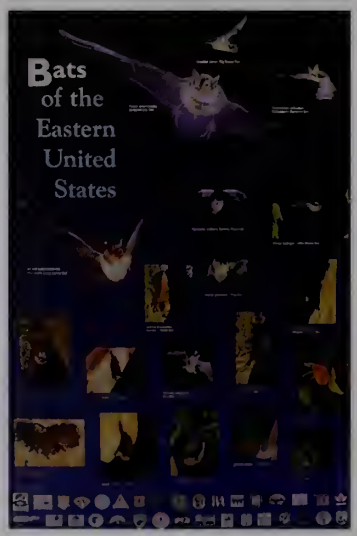
## VIRGINIA WILDLIFE POSTERS



"Winter Comfort" by Bob Henley, a signed and numbered limited edition (950) print 13" X 19 ½". $45.00 each.

Make check payable to Treasurer of Virginia and send to "Winter Comfort" VDGIF, P.O. Box 11104, Richmond, VA 23230-1104.

## BAT POSTER




The attractive poster, Bats of the Eastern United States (24" X 36"), is only $10. Includes information about each species found in the eastern United States. Checks should be payable to the Treasurer of Virginia, care of Mary Beth Murr. Order from Ray Fernald at the Nongame Program, Virginia Department of Game and Inland Fisheries, P.O. Box 11104, Richmond, VA 23230-1104.

## THE 1997-1998 DUCK PRINT

1997 Virginia Waterfowl Stamp Print by Roger Cruwys. Chocolate Labrador retriever with pintail. Overall size 12" X 14". For information on this limited edition print call Sport'en Art, 1-800-382-5723.

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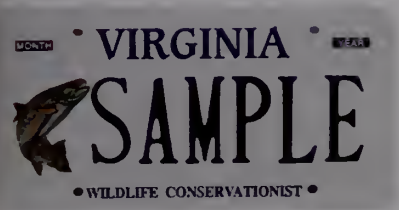


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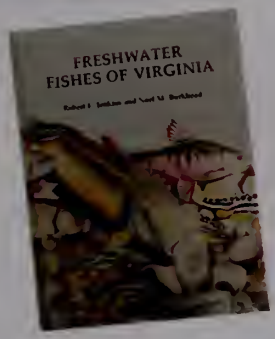


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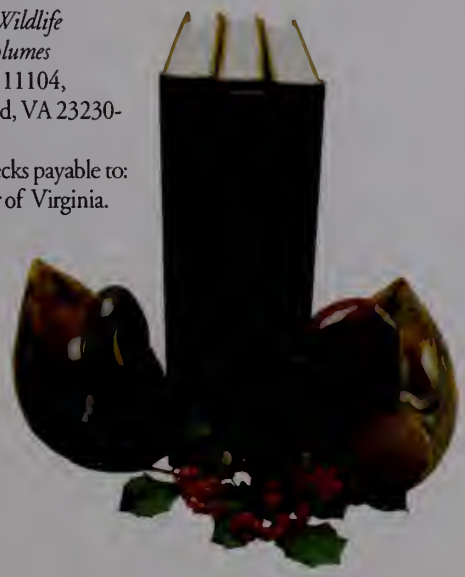

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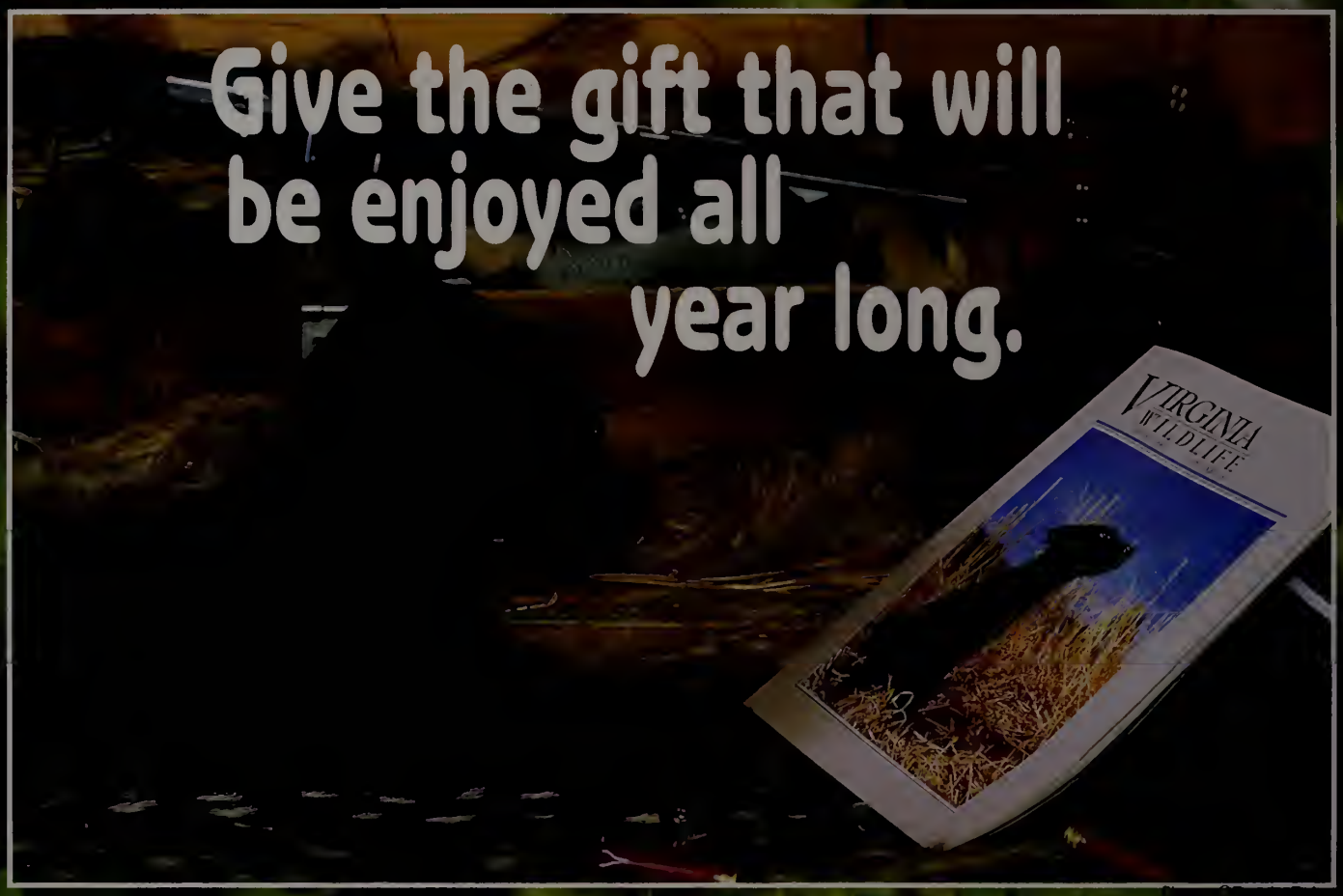


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